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ABSTRACT

Fifteen units on office duplication practices are presented in this teacher's guide. The unit topics include the following: consumer mathematics, stock record control, paper characteristics and classification, immovable carriage typewriter, using the manual typewriter, written communications, clerical recordkeeping, petty cash, supplementary machines, measurement, layout, photocomposing, thermal process, master makers, and verbal and nonverbal communications. Each instructional unit generally contains eight components: performance objectives; an outline of minimum instructor and student activities to accomplish unit objectives; information sheets presenting basic unit content; transparency masters; job sheets which outline skills to be achieved; student assignment sheets related to the unit information sheets (answer sheets are provided); and objective tests with answer sheets. (CT)

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UNITS OF INSTRUCTION FOR OFFICE DUPLICATION PRACTICES

Volume II

MATERIALS DEVELOPED AND DISTRIBUTED BY

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SECOND EDITION

1979

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FOREWORD

The Office Duplication Practices (ODP) instructional units were developed as a result of a project funded by the Texas Education Agency to East Texas State University and the Occupational Curriculum Development Laboratory. These units were developed with the assistance of ODP instructors throughout the state of Texas and have been subjected to formal field testing and evaluation.

The enclosed materials provide instruction for skills to be acquired for entry level into various office occupations. They also provide uniformity in classroom instruction and program accountability.

Instructors' editions include objectives; suggested activities; references; information, assignment, and job sheets; tests; and answer sheets.

Student editions, which are duplicates of the instructors' materials with the exception of activity sheets, references, and answers, also are available.

The instructional materials have been reviewed by various groups to ensure educational equity and to provide a reading level appropriate for student use. However, since this program offering is available to both junior high and senior high school students, some of the instructional material may be inappropriate for a lower grade level. Care should be taken in reviewing this material prior to classroom use.

USE OF THE INSTRUCTIONAL UNITS

The ODP instructional units cover certain instructional areas in the classroom program. Each unit includes the basic components of a unit of instruction: performance objectives, suggested activities, information sheet, assignment sheets, job sheets, transparency masters, unit test, and answers to unit tests. Units are planned to cover more than one classroom period.

Careful study of each instructional unit will enable the teacher to determine:

- A. The amount of material that can be covered in each class period
- B. Skills that must be demonstrated
- C. Supplies and equipment needed for skill performance
- D. The amount of classroom time needed for teacher demonstration and student practice
- E. Supplementary materials to be ordered
- F. Any resource personnel who must be contacted

The specific components of an instructional unit perform the following functions:

OBJECTIVES

Each unit of instruction is based on performance objectives. These objectives specify behaviors the student will be exhibiting, thus providing students with a sense of direction.

Performance objectives are stated in two forms: Unit Objectives, which state materials to be covered in the units of instruction and how the student will handle the material; and Specific Objectives, which state the types of performance students should be displaying to satisfy the unit objective.

After the students read the objectives, classroom discussion should follow so that questions concerning expected performances can be answered.

SUGGESTED ACTIVITIES

Each unit of instruction has a suggested activities sheet outlining steps to follow in accomplishing specific objectives.

Instructor: Duties will vary from unit to unit, but the following are minimum activities:

1. Provide students with objectives, information, assignment and/or job sheets
2. Discuss objectives and information sheets
3. Make transparencies
4. Demonstrate procedures outlined on job sheets (when included)
5. Give test

Any additional instructional activities and teaching methods to aid students in accomplishing the objectives are strongly encouraged.

Student: Activities are listed to help achieve the objectives of the unit.

INFORMATION SHEET

Information sheets provide current data essential for meeting the cognitive requirements of the unit. These sheets provide an excellent guide for presenting material necessary to develop the skills specified in the unit objective.

Students should read the information sheets before the material is discussed in class. They are encouraged to make any additional notes on the information sheets to help them in their learning process.

TRANSPARENCY MASTER

Transparency masters provide information in a special way by presenting new material or reinforcing material presented in the information sheets. These are particularly effective when identification is necessary.

Transparencies made from the masters can be used as student handouts to supplement material contained in the information sheets.

JOB SHEETS

Job sheets are an integral part of each unit of instruction and the instructor should be able to demonstrate the skills outlined. Procedures specified in job sheets give direction for each skill being taught and allow both student and teacher to check student progress. Job sheets

provide a ready outline to students and furnish potential employers an outline of the types of skills being taught.

ASSIGNMENT SHEET

Assignment sheets give direction to study and furnish activities which provide application of the material contained in the information sheet. These may be given to students for completion in class or for homework assignments. Answer sheets are provided for checking student progress.

UNIT TEST

Unit test questions have been constructed to measure student achievement of each specific objective listed on the objectives sheet. Individual test items may be pulled out and used as short tests to determine student achievement of a particular objective. This kind of testing may be used as a daily quiz and will help the teacher spot difficulties being encountered by students in their efforts to accomplish the unit objective.

ANSWERS TO UNIT TEST

Test answers are provided for each unit. These may be used by the teacher and/or student for checking student achievement of the objectives.

PERSONALIZING AND LOCALIZING INSTRUCTIONAL UNITS

Carefully review the instructional units before using them in the classroom. In reviewing the units, you may find it necessary to localize the units based upon the needs of your students.

Units may be supplemented through use of audio-visuals, attention-getters, field trips, resource personnel, games and simulations, case studies, peer teaching, role playing, and personal experiences of both the teacher and students.

Various methods may be used in localizing a unit of instruction. You may wish to apply units of instruction to the local community, add additional materials from newspapers and magazines, invite local resource persons, and arrange for field trips.

In personalizing a unit of instruction, you may want to make the course content relevant to home and/or work situations. You may wish to involve students in planning a unit by using their own personal experiences. Involving students in presenting some of the material is sometimes an

effective example of peer teaching.

Remember that as an instructor, you may wish to add any objectives to the units of instruction based on the individual needs of the student. If this procedure is followed, you must add the corresponding information in the information sheet, add any assignment or job sheets as deemed necessary, and construct a corresponding unit test item.

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UNIT I

CONSUMER MATHEMATICS

UNIT OBJECTIVE

After completing this unit, the student should be familiar with banking terms and definitions, payroll receipts, and employment fees. The student should also have a basic understanding of banking procedures and different forms of interest. This knowledge will be evidenced through demonstration and by satisfactorily completing a unit test.

SPECIFIC OBJECTIVES

After completing this unit of instruction, the student should be able to:

1. Match the terms on banking procedures with their proper definitions
2. Explain the various procedures used in banking
3. Identify the different types of interest
4. Describe the procedures used by employment agencies
5. Explain different procedures used in payroll receipts
6. Complete new account cards used in banking
7. Identify check stub information
8. Complete a deposit receipt
9. Complete a check
10. Compute simple interest on an account
11. Compute simple interest on a promissory note
12. Figure monthly payments on an installment credit account
13. Determine employment fees
14. Figure salary
15. Determine standard deductions

UNIT I
CONSUMER MATHEMATICS

SUGGESTED ACTIVITIES

I. Instructor:

- A. Provide objective sheet
- B. Discuss objective sheet
- C. Pass out information sheet
- D. Discuss information sheet
- E. Make and show transparencies
- F. Distribute and discuss assignment sheets
- G. Demonstrate procedures outlined in assignment sheets
- H. Give test

II. Student:

- A. Read and discuss objective sheet
- B. Read and discuss material contained in information sheet
- C. Complete assignment sheets
- D. Take test

INSTRUCTIONAL MATERIALS

I. Included in this unit:

- A. Objectives
- B. Information sheets
- C. Transparency masters
 - 1. I-TM-1--Credit Application
 - 2. I-TM-2--Bank Check and Stub

D. Assignment sheets

1. Assignment Sheet #1--Completing New Account Cards
2. Assignment Sheet #2--Identifying Check Stub Information
3. Assignment Sheet #3--Completing the Deposit Receipt
4. Assignment Sheet #4--Completing a Check
5. Assignment Sheet #5--Computing Simple Interest on an Account
6. Assignment Sheet #6--Computing Simple Interest on Promissory Notes
7. Assignment Sheet #7--Figuring Monthly Payments on Installment Credit Accounts
8. Assignment Sheet #8--Determining Employment Fees
9. Assignment Sheet #9--Figuring a Salary
10. Assignment Sheet #10--Determining Standard Deductions

E. Answers to assignment sheets

F. Unit test

G. Answers to unit test

II. References:

A. Books:

1. Huffman, Harry, Ruth M. Twiss and Harold H. Williams. Math for Business Careers. Dallas: Gregg Division, McGraw-Hill Book Company, 1975.
2. Fairbank, Roswell E., Robert A. Schultheis and Edwin B. Piper. Mathematics for the Consumer. Cincinnati: South-Western Publishing Company, 1975.
3. Martinka, Marie. Vocational Mathematics for Business. Cincinnati: South-Western Publishing Company, 1972.

4. Rosenberg, Henry. Projects in Record Keeping. Cincinnati: South-Western Publishing Company, 1977.
5. Wood, Merle and Barton F. Wigge, Jr. Payroll Systems and Procedures. McGraw-Hill Publishing Company, 1970.
6. Huffman, Harry and Jeffrey R. Stewart, Jr. General Record Keeping. 7th ed. Dallas: Gregg Division, McGraw-Hill Book Company, 1976.
7. Rosenberg, R. Robert and Roy W. Poe. College Business Mathematics. 5th ed. Dallas: Gregg Division, McGraw-Hill Book Company, 1973.
8. DeBrunn, S. Joseph, Peter G. Haines, Dean R. Malsbary and Ernest H. Crabbe. General Business. 10th ed. Cincinnati: South-Western Publishing Company, 1971.
9. Lyon, Herbert L., John M. Ivancevich and Daniel H. Kruger. General Business, Concepts, Values, Skills. Harcourt Brace Jovanovich, Inc., 1976.
10. Rosenberg, R. Robert, Harry Lewis and Roy W. Poe. Business Mathematics. 8th ed. Dallas: Gregg Division, McGraw-Hill Book Company, 1975.

B. Training aids:

1. Cashing Checks, Bank Administration Institute, 303 South Northwest Highway, P. O. Box 500, Park Ridge, Illinois 60068.
2. Death and Taxes, H & R Block, obtained from local H & R Block Office.
3. Wilbur Gets the Message, About Payroll Savings; United States Savings Bonds Division, United States Treasury Department, Washington, D.C. 20226.

UNIT I
CONSUMER MATHEMATICS

INFORMATION SHEET

I. Terms and definitions

- A. Depositor--A person who puts money in a bank account
- B. Types of accounts
 - 1. Checking--Money a person places in a bank, and then can take out by writing checks
 - 2. Savings--Money a depositor puts in the bank in a special place (not in a checking account). The bank pays interest (rent) for the use of this money
- C. Service charge--A small amount of money the bank takes from a depositor to help pay for taking care of a checking account
- D. Principal--The amount of money a person borrows when taking out a loan
- E. Interest--The "rent" paid for the use of another's money
- F. Rate--The percent of the principal the bank charges as interest
- G. Promissory note--A paper the borrower signs, promising to pay back money borrowed by a certain date
- H. Banking services--Things a bank does to help people (e.g. provide checking accounts, loans, savings accounts)
- I. Time--The number of days, months, or years the promissory note is held before it is paid
- J. Payroll receipt--A piece of paper showing all earnings to date. It also shows the employee's name, gross earnings, deductions, and net pay

- K. Balance--The amount of money in a persons' account
- L. Deposit slip--A form listing the amount of money bills, checks, and coins to be added to an account
- M. Net pay--Salary after all taxes and deductions are taken out
- N. Gross pay--Total salary made before deductions
- O. Dependent--A person who is helped with money matters by another person
- P. Average balance--The amount of money kept in a checking account during a period of time (e.g., for one month)
- Q. Outstanding check--A check not yet at the bank for payment
- R. Endorsement--Signature of the person cashing a check, placed on the back side of the check
- S. Check--An order from a depositor telling the bank to pay a set amount of money from the depositor's account to the person named on the check

II. Banking services

- A. Checking account--The bank performs many services for its customers or depositors that help them to manage their money properly. It provides a safe place to keep money and a way to safely take out money by writing a check.
 - 1. The depositor opens an account by going to the New Accounts Department at a bank.
 - 2. The customer must sign a signature card to show his or her handwriting, and fill out a personal information card.
 - 3. A deposit slip must be filled in before money can be put into an account.
 - 4. To take out money, the customer may write a check not to exceed the balance.

B. Savings account--A service offered by the bank to its customers, allowing them a safe place to save money

1. The savings account draws interest which can be left to increase the original amount
2. The simple interest formula is used to show the amount of interest that has built up over a specified time.
(Interest = Principal x Rate x Time)

Example: \$100 has been put into a savings account for six months, receiving 6% interest

$$\begin{array}{rcll} \text{Interest} & = & \text{Principal} \times \text{Rate} \times \text{Time} \\ \underline{\$3.00} & = & \$100 \quad \times \quad .06 \times 6/12 \end{array}$$

C. Promissory note--An instrument that lets the bank customer borrow a certain sum of money or the principal

1. Through a written, signed agreement, the customer promises to repay the principal + interest.
2. The simple interest formula is again used to determine the amount of interest that has to be paid on the loan.
(Interest = Principal x Rate x Time)

(Example: \$75 has been borrowed for three months at 9% interest

$$\begin{array}{rcll} \text{Interest} & = & \text{Principal} \times \text{Rate} \times \text{Time} \\ \underline{\$6.39} & & \$75 \quad \times \quad .09 \times 3/12 \end{array}$$

D. Monthly service charge--A charge used to maintain the accounts of the bank depositors

1. A good point to consider when choosing a bank is service charge, because:
 - (a) Some banks have no service charge
 - (b) Others charge up to 10¢ for each check
 - (c) Some banks charge a \$1-\$5 per month fee

2. In some banks, the service charge depends on the average balance. Many increase the charge if the balance gets low.

Example:

<u>Avg. Balance</u>	<u>Service charge</u>
\$ 0-\$100	\$5
\$101-\$200	\$4
\$201-\$300	\$3
\$301-\$400	\$2
\$401-\$500	\$1
\$501-and up	No charge

If the balance drops below a certain point the service charge would be:

Example:

<u>Avg. Balance</u>	<u>Service charge</u>
\$325	\$2
\$485	\$1
\$560	-0-
\$ 99	\$4

III. Figuring interest

- A. Compound interest--Interest figured on both the principal and the interest earned. This interest is added regularly to the principal. This can be done every year, every six months, or some other period.

Example: At the end of the second year, Jack's savings account would be increased by 5% of \$265. This compound interest amounts to \$13.25; the new balance would be \$278.25.

- B. Simple interest--A certain percentage charged on a specified amount of money borrowed. The formula for figuring interest is as follows:
Interest = Principal x Rate x Time. Example:

$$I = P \times r \times t$$

$$\text{Interest} = \$4000 \times .04 \times 2 = \$320$$

- C. Revolving interest charge--This type of account has credit limits. These limits are normally set when the account is opened. This simply means that if Jack Jones credit limit at a local department store is \$400, Jack can never owe more than \$400 on his account. If Jack's income increases, he can apply to have his credit limit increased. At the end of each billing period, Jack receives a statement showing the amount of his bill. At this time Jack has two choices:

1. He can pay the entire bill and no interest is charged. This would be considered a Noninstallment Credit Account.
2. Jack can pay only part of the bill and by doing this the RCA becomes an Installment Credit Account. The interest can be figured on an installment credit account by using the following formula:

$$\text{Monthly principal} = \frac{\text{Original debt}}{\text{Number of Payments}}$$

Annual Percentage Rate

Example:

<u>Amount Financed</u>	<u>Annual Percentage</u>
.01 to \$1,000	18% annually or 1 1/2 % monthly
Excess over \$1,000	12% annually or 1% monthly

$$\text{Monthly principal} = \frac{\text{Original debt}}{\text{Number of payments}}$$

9.84	= \$118.08	÷ 12
Amount Financed	\$100	
Interest	\$18.08	
Original Debt	\$118.08	
Annual Percentage	18% annually	

INTEREST-RATE CHART

AMOUNT OF LOAN	ANNUAL INTEREST RATE	12-MONTH LOAN		24-MONTH LOAN		36-MONTH LOAN	
		MONTHLY PAYMENTS	TOTAL INTEREST PAID	MONTHLY PAYMENTS	TOTAL INTEREST PAID	MONTHLY PAYMENTS	TOTAL INTEREST PAID
\$ 100	18%	\$ 9.84	\$ 18.00	\$ 5.67	\$ 36.08	\$ 4.28	\$ 54.08
\$ 200	18%	\$19.68	\$ 36.16	\$11.34	\$ 72.16	\$ 8.56	\$108.16
\$ 300	18%	\$29.50	\$ 54.00	\$17.00	\$108.00	\$12.84	\$162.24
\$1,050	12%	\$98.00	\$126.00	\$54.25	\$252.00	\$39.66	\$377.76

(NOTE: The above chart shows how the length of time for which money is borrowed affects the amount it costs you to use the money. The quicker you pay back a loan, the less it costs you.)

IV. Employment fees

Some important facts to consider when choosing an employment agency are:

- A. The fee charged by the employment agency
- B. State employment agencies do not charge their applicants because they are tax-supported
- C. The private employment agencies charge different according to the kind and demand for different jobs
 1. Fee paid by employer: The company hiring the applicant pays 100% of the fee.
 2. Fee paid by employee: The applicant pays 100% of the fee if hired.
 3. Split fee: The applicant and the employer divide the fee based upon a previous understanding.

Example: The fee is \$300. The employer has agreed to pay 60% with the applicant paying the rest.

Employer's part \$180.00
Applicant's part \$120.00

- D. A binding contract is signed when the applicant first comes to the employment agency. The contract states that if the person gets the job, the fee must be paid at an agreed upon time.

V. Payroll receipts

- A. Figuring salary
 1. Monthly--paid once a month

- a. Employees are hired with a salary that is to be paid by the month
 - b. Usually monthly salaried employees are not eligible for overtime pay
 - c. Federal and state employees office managers, and supervisors are paid per month
2. Biweekly or weekly paid every two weeks or each week
- a. In this case employees agree to get paid once a week or every two weeks
 - b. These employees usually do not get overtime pay
3. Hourly or daily--Paid for a 40-hour week with 1½ times the regular rate for time worked over 40 hours
- a. Hours are usually kept by punching a time card or keeping hours on a time sheet. Gross salary for a week is found by multiplying the wage per hour by the number of hours worked

Example: Wage (rate per hour) \$2.35
 Number of hours 40

\$ 2.35	
x 40	
<u>\$94.00</u>	Gross pay for one week

- b. Overtime pay is usually figured on a time and a half rate for every hour worked over 40

Example:

\$ 2.50	Rate per hour (wage)
x 1.5	Overtime rate
<u>3.75</u>	Overtime rate
x 5	Overtime hours
<u>\$18.75</u>	Overtime pay

\$ 2.50	
<u>40</u>	Number of hours
\$100.00	Regular pay
+ 18.75	Overtime pay
<u>\$118.75</u>	Gross pay

4. Piece basis--Paid a certain amount for each unit the employee produces. Wages are usually paid weekly

- a. In this way it is not important to know how long it took an employee to produce the item
- b. There is no overtime pay in this case

Example: An employee producing 50 items a week would get the same pay for each item as another employee producing 30 items. Of course, the first employee would have more earnings for the week

B. Standard deductions

1. Income Tax--The employer must, by law, deduct city, state, and federal taxes from the employee's gross salary. The income tax on each person's salary is figured on earnings and number of dependents.
2. Social Security (FICA)--Another tax that must be deducted, by law, is this tax which provides benefits for the worker or any eligible dependent upon the worker's retirement, disability or death. The current Social Security rate is 6.13 percent of the gross salary, up to \$22,900 per year.

Example: John has an after-school job. He works five days a week, from 5 p.m. until 9 p.m. He makes \$2.25 per hour and must ride the bus to and from work.

\$2.25 Per hour	16% Income tax
4 hours per day	6.13% FICA
5 days per week	
	Income tax
\$ 2.25 Per hour	\$ 45.00 Gross salary
x 4 Hours per day	x .16 Income tax
9.00 Per day	27000
x 5 Days per week	4500
\$45.00 Per week gross salary	\$ 72000
	\$ 7.20/00 Deduction

(Continued on next page)

\$7.20	Income tax	\$	45.00	Gross salary
+2.76	FICA	x	.0613	FICA
\$9.96	Combined deduc-		13500	
	tion		4500	
\$45.00	Gross salary		27000	
- 9.96	Income tax &	\$	2.758500	
\$35.04	FICA			
- 5.00	Bus fees	\$	2.76	Deduction (Rounded
\$30.04	Actual pay			Off)

3. Private retirement funds--Some companies have a private retirement system much like the Social Security system. The rate for most of these private systems is approximately 6% of the gross salary.
4. Insurance--Many companies have some sort of insurance program. Employees usually can choose medical, life and fire insurance. Most employees use this benefit by covering themselves, their families, and their home with different plans. Many companies will pay most or all of the employee's medical insurance as a benefit. The employees can have the company take out insurance costs from their check.
5. Savings--Almost all companies have some form of savings through payroll deductions.
6. Credit Unions--Organizations much like banks, that will deduct a specified amount to go into a savings account or toward payment of a loan.
7. United States Savings Bonds--Guaranteed by the federal government and draw interest at a specified rate.

CREDIT APPLICATION

APPLICANT

First name		Middle	Last name		Age	Home Telephone		☐ Married ☐ Unmarried ☐ Separated	
Home address			City	State	ZIP code	How long Yrs Mo		# dependents	
☐ Own rent	Mortgage holder or landlord		Monthly payment \$	Previous address		City	State	How long Yrs Mo	
Your employment			Address			How long Yrs Mo	Position	Telephone	
Monthly income from present employment \$		Other income \$		Source of other income					
Alimony, child support, separate maintenance received under court order ☐ written agreement ☐ oral understanding ☐ Alimony, child support, or separate maintenance income need not be revealed if you do not wish to have it considered as a basis for repaying this obligation.									
Previous employment			Address			Position	How long Yrs Mo	Drivers license # State	
College attended			City	State	Yr Grad	Degree	Social Security #		
Applicant's nearest relative			Complete address				Telephone	Relationship	
Name of bank		checking savings loan	Address			Checking #	Savings #		

SPOUSE

First name		Middle	Last name		Social Security #	Drivers license # State	
Spouse's employment			Address		Telephone	How long	Position
Spouse's nearest relative			Complete Address			Telephone	Relationship

CREDIT REFERENCE

Type of account	Name and address of firm or bank	Acct #	Balance	Monthly payment
Master Charge				
Visa (BankAmericard)				
Dept store				
Dept store				
Dept store				
Automobile loan				

Are there any unsatisfied judgments against you? ☐ Yes ☐ No	If yes to whom owed?	Have you been declared bankrupt in the last 14 years? ☐ Yes ☐ No	If yes where?	Amount \$	Year
---	----------------------	--	---------------	-----------	------

Everything that I have stated in this application is correct to the best of my knowledge. I understand that you will retain this application whether or not it is approved. You are authorized to check my credit and employment history and to answer questions about your credit experience with me. I have read the Customer Agreement on the reverse side of this application and agree to the terms and conditions thereof. The individual applicant and the joint applicant(s) will be liable for all charges incurred jointly and severally according to the Customer Agreement.

NOTICE: IMPORTANT INFORMATION ON REVERSE SIDE

Applicant Signature

Date

Joint Applicant Signature

Date

BANK CHECK AND STUB

NO. _____ \$ _____ DATE _____ 19____ TO _____ FOR _____	NO. _____ _____ 19____ PAY TO THE ORDER OF _____ \$ _____ _____ DOLLARS FIRST NATIONAL BANK ANYTOWN, ANYWHERE ⑆0227⑈0005 242⑈227720⑈
--	--

	DOLLARS	CENTS	
BALANCE			
AMT. DEPOSITED			
TOTAL			
AMT. THIS CHECK			
BALANCE			

UNIT I

CONSUMER MATHEMATICS

ASSIGNMENT SHEET #1--COMPLETING NEW ACCOUNT CARDS

Directions: Complete the following cards to open a bank account. Fill in the blanks with information.

(NOTE: These are only two types of many different kinds of new account forms used. All new account forms ask for the same type of information.)

ACCOUNT TITLE _____		CHECKING ACCOUNT NUMBER											
		SAVINGS ACCOUNT NUMBER											
The undersigned, respectively, assent to the rules and regulations governing account relationships with the Bank and to all additions and amendments thereto. Each undersigned guarantees the genuineness of the signature hereto of the other, and agrees that the Bank may credit to this account any instrument payable to the order of either or both, when endorsed by either, both or neither. Each undersigned states that it is intended that any sum to the credit of this account may be withdrawn on the signatures of either undersigned during their joint lives, and after the death of either, the balance shall be the property of the survivor, and may be withdrawn, subject to State inheritance law requirements, by such survivor. (The foregoing sentence does not apply if "TWO SIGNATURES" box below is checked.) The foregoing provisions respecting this account may be changed only on written notice signed by both of us and delivered to and accepted by the Bank.													
AUTHORIZED SIGNATURES													
(A) _____	DATE _____												
(B) _____	DATE _____												
<table style="width: 100%; font-size: 0.7em;"> <tr> <td>☐ Reg. Checking</td> <td>☐ Individual Acct</td> <td rowspan="5" style="vertical-align: top; padding-left: 20px;"> (A) SOC. SEC. No. _____ (B) SOC. SEC. No. _____ </td> </tr> <tr> <td>☐ Spec. Checking</td> <td>☐ In Trust</td> </tr> <tr> <td>☐ Savings Acct</td> <td>☐ Two Signatures Required</td> </tr> <tr> <td>☐ Statement Savings</td> <td>☐ Estate, Guardian, or Trustee</td> </tr> <tr> <td>☐ Joint Acct</td> <td>☐ Certificate of Deposit</td> </tr> </table>			☐ Reg. Checking	☐ Individual Acct	(A) SOC. SEC. No. _____ (B) SOC. SEC. No. _____	☐ Spec. Checking	☐ In Trust	☐ Savings Acct	☐ Two Signatures Required	☐ Statement Savings	☐ Estate, Guardian, or Trustee	☐ Joint Acct	☐ Certificate of Deposit
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☐ Spec. Checking	☐ In Trust												
☐ Savings Acct	☐ Two Signatures Required												
☐ Statement Savings	☐ Estate, Guardian, or Trustee												
☐ Joint Acct	☐ Certificate of Deposit												

NEW ACCOUNT	
Name _____	Address _____
Soc. Sec. No. _____	
Wife's Name _____	Phone _____
Soc. Sec. No. _____	Former Address _____
Children _____	
	Occupation _____
Former Bank _____	How Long? _____
	Employer _____
Reference _____	Prev. Occupation _____
	Employer _____
	Where? _____
	How Long? _____

UNIT I

CONSUMER MATHEMATICS

ASSIGNMENT SHEET #2--IDENTIFYING CHECK STUB INFORMATION

Directions: Some of the following items are found on the check book stub. To the right of the items place a "✓" under Right if the item is present on the stub and under Wrong if the item is not present on the stub.

	Right	Wrong
1. Date the check is written		
2. Individual's account number		
3. Check number		
4. Previous balance		
5. New balance		
6. Name of bank		
7. Individual's address		
8. Amount of the check		
9. To whom the check is made out		
10. Check writer's signature		
11. Amount deposited		

UNIT I

CONSUMER MATHEMATICS

ASSIGNMENT SHEET #3--COMPLETING THE DEPOSIT SLIP

Directions: Use the following information to fill out the deposit slip.

Bills or currency	\$60.00
Coins	\$ 2.49
Checks	\$48.62
Cash received	\$25.00
Net deposit	\$86.11

Use the student's name and account number 65-060-00.

(NOTE: The deposit slip requires a duplicate copy.)

DEPOSITED WITH			
	ACCOUNT NUMBER		
	NAME _____ ADDRESS _____ CITY _____		
FOR BANK USE		19 _____	
Sign Here For Less Cash CHECKS AND OTHER ITEMS ARE RECEIVED FOR DEPOSIT SUBJECT TO THE TERMS AND CONDITIONS OF THIS BANK'S COLLECTION AGREEMENT		CURRENCY	
		COIN	
		CHECKS	
		TOTAL	
		LESS CASH RECEIVED	
		USE BACK SIDE FOR LISTING ADDITIONAL CHECKS	NET DEPOSIT ▶

UNIT I

CONSUMER MATHEMATICS

ASSIGNMENT SHEET #4--COMPLETING A CHECK

Directions: Write check #28 on January 30, 19-- for \$85.39 payable to Harris Carpets. Subtract \$85.39 from the balance of \$269.75 in the check register. Use account number 65-060-00.

28

88-2398
1189

19

PAY TO THE
ORDER OF

\$

DOLLARS

HOME TOWN BANK
Your Town, Texas

MEMO

12911900239810 116500600000

[illegible]

UNIT I
CONSUMER MATHEMATICS

ASSIGNMENT SHEET #5--COMPUTING SIMPLE INTEREST ON AN ACCOUNT

Directions: Using the simple interest formula, figure the amount of interest earned on the following accounts.

Formula: Interest = Principal x Time x Rate

Example: \$498, six months, 6%

$$\$498 \times .06 \times \frac{6}{12} = \$14.94$$

- A. \$235 6 months 6 1/2%
- B. \$310 3 months 7 %
- C. \$520 12 months 6 %
- D. \$380 8 months 6 %
- E. \$150 9 months 6 3/4%
- F. \$ 90 24 months 7 %

(Note: the interest rate is computed annually.)

UNIT I
CONSUMER MATHEMATICS

ASSIGNMENT SHEET #6--COMPUTING SIMPLE INTEREST
ON PROMISSORY NOTES

Directions: Using the simple interest formula, determine the interest to be paid back on the following promissory notes.

Formula: $\text{Interest} = \text{Principal} \times \text{Time} \times \text{Rate}$

- A. \$ 69 3 months 8 %
- B. \$400 24 months 9 %
- C. \$ 39 3 months 10%
- D. \$198 9 months 10%
- E. \$350 10 months 12%
- F. \$745 12 months 18%
- G. \$800 24 months 20%

(NOTE: The interest rate is computed annually.)

UNIT I

CONSUMER MATHEMATICS

ASSIGNMENT SHEET #7--FIGURING MONTHLY PAYMENTS ON
INSTALLMENT CREDIT ACCOUNTS

Directions: Using the following formula, determine the monthly payments for the following installment credit accounts.

Formula: $\text{Monthly Principal} = \text{Original debt} \div \text{Number of payments}$

Example: $\$9.84 = \$118.08 \div 12$

A. _____ = $\$136.08 \div 24$

B. _____ = $\$236.16 \div 12$

C. _____ = $\$272.16 \div 24$

D. _____ = $\$1427.76 \div 36$

E. _____ = $\$1200.50 \div 18$

F. _____ = $\$1500.00 \div 12$

G. _____ = $\$1600.00 \div 15$

H. _____ = $\$80.85 \div 12$

UNIT I
CONSUMER MATHEMATICS

ASSIGNMENT SHEET #8--DETERMINING EMPLOYMENT FEES

Directions: Using the following information, determine the employment fee for both the employer and employee.

Employment fee \$300.00

	<u>Amount paid</u>
A. Employer 60%	_____
Employee 40%	_____
B. Employer 75%	_____
Employee 25%	_____
C. Employer 80%	_____
Employee 20%	_____
D. Employer 65%	_____
Employee 35%	_____
E. Employer 90%	_____
Employee 10%	_____

UNIT I

CONSUMER MATHEMATICS

ASSIGNMENT SHEET #9--FIGURING A SALARY

Directions: Using the following information, determine the regular pay, overtime pay, and the gross pay for one week. Regular time for one week is 40 hours.

Problem (A) Hours worked 45
Pay per hour \$4.50
Overtime pay per hour \$3.75

Overtime rate	=	Rate per hour	=
Overtime hours	=	Number hours	=
Overtime salary	= x _____	Regular salary	= x _____
		Overtime salary	= + _____
		Gross salary	= _____

Problem (B) Hours worked 50
Pay per hour \$4.00
Overtime pay per hour \$6.00

Problem (C) Hours worked 60
Pay per hour \$5.00
Overtime pay per hour \$7.50

(NOTE: Follow outline from Problem A, to complete Problems B & C. Show your work for B & C on the back of this page.)

UNIT I

CONSUMER MATHEMATICS

ASSIGNMENT SHEET #10--DETERMINING STANDARD DEDUCTIONS

Directions: Using the following information, determine the amount of Social Security (F.I.C.A.) and income tax deducted from the gross salary.

Problem (A) Gross salary \$45.00
Income tax 16%
Social Security 6.13%

\$45.00	Gross salary	\$45.00	Gross salary
x .16	Income tax	x 6.13	FICA
\$	Total income tax		Total FICA

Actual pay after deductions \$ _____

Problem (B) Gross salary \$125.00
Income tax 16%
Social Security 6.13%

Problem (C) Gross salary \$150.00
Income tax 16%
Social Security 6.13%

(NOTE: Follow outline from Problem A, to complete Problems B & C. Show your work for B & C on back of this page.)

UNIT I

CONSUMER MATHEMATICS

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

ACCOUNT TITLE		2 3 2 1 5 6 2 8 7 7									
Jack and Jean Smith		CHECKING ACCOUNT NUMBER									
		7 8 7 2 1 2 1 3 4 5									
		SAVINGS ACCOUNT NUMBER									

The undersigned, respectively, assent to the rules and regulations governing account relationships with the Bank and to all additions and amendments thereto. Each undersigned guarantees the genuineness of the signature hereto of the other, and agrees that the Bank may credit to this account any instrument payable to the order of either or both, when endorsed by either, both or neither. Each undersigned states that it is intended that any sum to the credit of this account may be withdrawn on the signatures of either undersigned during their joint lives, and after the death of either, the balance shall be the property of the survivor, and may be withdrawn, subject to State inheritance tax law requirements, by such survivor. (The foregoing sentence does not apply if "TWO SIGNATURES" box below is checked.) The foregoing provisions respecting this account may be changed only on written notice signed by both of us and delivered to and accepted by the Bank.

AUTHORIZED SIGNATURES			
(A)	<i>Jack Smith</i>	DATE	6-1-78
(B)	<i>Jean Smith</i>	DATE	6-1-78

☒ Reg. Checking	☐ Individual Acct.	(A) SOC SEC No.	656-94-5037
☐ Spec. Checking	☐ In Trust	(B) SOC SEC No.	659-84-5128
☐ Savings Acct.	☐ Two Signatures Required		
☐ Statement Savings	☐ Estate, Guardian, or Trustee		
☐ Joint Acct.	☐ Certificate of Deposit		

NEW ACCOUNT	
Name	Jack Smith
Soc. Sec. No.	656-94-5037
Wife's Name	Jean Smith
Soc. Sec. No.	659-84-5128
Children	Jack
	John
	Mary
Former Bank	1st State Bank
	Abilene, Tx. 72843
References	Jack Chapin, Wylie
	John Smith, Lucas
	Roy Clark, Lavon
Address	Route 1
	Wylie, Texas 75198
Phone	441-2287
Former Address	P.O. Box 1322
	Abilene, Texas
	92448
Occupation	Farmer
How Long?	15 years
Employer	Self
Prev. Occupation	none
Employer	n/a
Where?	n/a
How Long?	n/a

Assignment Sheet #2

1. Right
2. Wrong
3. Right
4. Right
5. Right
6. Wrong
7. Wrong
8. Right
9. Right
10. Wrong
11. Right

Assignment Sheet #3

DEPOSITED WITH		Sign Here For Last Cash CHECKS AND OTHER ITEMS ARE RECEIVED FOR DEPOSIT SUBJECT TO THE TERMS AND CONDITIONS OF THIS BANK'S COLLECTION AGREEMENT																																											
																																													
232 2428 ACCOUNT NUMBER																																													
<u>July 2</u> 19 <u>78</u>																																													
NAME <u>Joy Jones</u>																																													
ADDRESS <u>P. O. Box 3391</u>																																													
CITY <u>Lavon, Texas 77528</u>																																													
FOR BANK USE																																													
		<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">CURRENCY</td> <td style="width: 20%; text-align: right;">60</td> <td style="width: 20%; text-align: right;">00</td> </tr> <tr> <td>COIN</td> <td style="text-align: right;">2</td> <td style="text-align: right;">49</td> </tr> <tr> <td>CHECKS</td> <td style="text-align: right;">43</td> <td style="text-align: right;">62</td> </tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr> <td>TOTAL</td> <td style="text-align: right;">111</td> <td style="text-align: right;">11</td> </tr> <tr> <td>LESS CASH RECEIVED</td> <td style="text-align: right;">25</td> <td style="text-align: right;">00</td> </tr> <tr> <td>USE BACK SIDE FOR LISTING ADDITIONAL CHECKS</td> <td style="text-align: right;">86</td> <td style="text-align: right;">11</td> </tr> <tr> <td>NET DEPOSIT</td> <td></td> <td></td> </tr> </table>		CURRENCY	60	00	COIN	2	49	CHECKS	43	62																						TOTAL	111	11	LESS CASH RECEIVED	25	00	USE BACK SIDE FOR LISTING ADDITIONAL CHECKS	86	11	NET DEPOSIT		
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LESS CASH RECEIVED	25	00																																											
USE BACK SIDE FOR LISTING ADDITIONAL CHECKS	86	11																																											
NET DEPOSIT																																													

Assignment Sheet #4

28	
PAY TO THE ORDER OF	<i>Harris Carpets</i>
DATE	<i>January 30 1978</i>
AMOUNT	<i>\$85.39</i>
MEMO	<i>Eighty five and 39/100</i>
HOME TOWN BANK	
Your Town, Texas	
SIGNATURE	<i>John Doe</i>
1:9119 23981: 65 060 00	

PLEASE BE SURE TO <u>DEPOSIT</u> ANY PER CHECK CHARGES OR SERVICE CHARGES THAT MAY APPLY TO YOUR ACCOUNT						
CHECK NO.	DATE	CHECKS ISSUED TO OR DESCRIPTION OF DEPOSIT	AMOUNT OF CHECK	✓	CHECK FEE (if any)	BALANCE
28	1/30/78	Harris Carpets	85.39			269.75
						85.39
						184.36

Assignment Sheet #5

- A. \$7.64
- B. \$5.43
- C. \$31.20
- D. \$15.20
- E. \$7.59
- F. \$12.60

Assignment Sheet #6

- A. \$1.38
- B. \$72.00
- C. 98¢
- D. \$11.14
- E. \$35.00
- F. \$134.10
- G. \$320.00

Assignment Sheet #7

- A. \$5.67
- B. \$19.68
- C. \$11.34
- D. \$39.66
- E. \$66.70
- F. \$125.00
- G. \$106.67
- H. \$6.74

Assignment Sheet #8

	(A)	(B)	(C)	(D)	(E)
Employer	\$180.00	\$225.00	\$240.00	\$195.00	\$270.00
Employee	\$120.00	\$ 75.00	\$ 60.00	\$105.00	\$ 30.00

Assignment Sheet #9

A. Rate per hour	= \$ 2.50	Overtime rate	= \$ 3.75
Number hours	= x 40	Overtime hours	= x 5
Regular salary	= \$ 100.00	Overtime salary	= \$ 18.75
Overtime salary	= + 18.75		
Gross salary	= \$ 118.75		

B. Rate per hour	= \$ 4.00	Overtime rate	= \$ 6.00
Number hours	= 40	Overtime hours	= x 10
Regular salary	= \$ 160.00	Overtime salary	= \$ 60.00
Overtime salary	= + 60.00		
Gross salary	= \$ 220.00		

C. Rate per hour	= \$ 5.00	Overtime rate	= \$ 7.50
Number hours	= x 40	Overtime hours	= x 20
Regular salary	= \$ 200.00	Overtime salary	= \$ 150.00
Overtime salary	= + 150.00		
Gross salary	= \$ 350.00		

Assignment Sheet #10

A. Gross salary	\$ 45.00
x .16	
	27000
	4500
Total income	
tax	\$7.2000

Gross salary	\$ 45.00
FICA	x .0613
	13500
	4500
	27000
	\$ 2.758500

Total FICA \$ 2.76 (Rounded Off)

Actual pay \$ 35.04

B. Gross salary	\$ 125.00
x .16	
	75000
	12500
Total income	
tax	\$20.0000

Gross salary	\$ 125.00
x .0613	
	37500
	12500
	75000
	\$ 7.662500

Total FICA \$ 7.66

Actual pay \$ 97.34

C. Gross salary \$ 150.00
x .16
90000
15000
Total income \$ 24.0000
tax \$ 24.0000

Gross Salary \$ 150.00
.0613
45000
15000
90000
\$ 9.195000

Total FICA \$ 9.20 (Rounded Off)

Actual pay \$ 116.80

UNIT I
CONSUMER MATHEMATICS

UNIT TEST

1. Terms and definitions

Match the terms on the left with the best definitions.

- | | |
|---------------------------|--|
| a. _____ Banking services | 1. A form listing the amount of bills, checks, and coins to be added to an account |
| b. _____ Checking account | 2. The number of days, months, or years the promissory note is held |
| c. _____ Service charge | 3. A small amount of money the bank takes from a depositor to help pay for taking care of a checking account |
| d. _____ Savings account | 4. Amount of money a person borrows for a loan |
| e. _____ Interest | 5. A piece of paper telling a person the amount of money earned |
| f. _____ Principal | 6. The amount of money in a person's account |
| g. _____ Rate | 7. A person who is helped with money matters by another person |
| h. _____ Time | 8. Salary after all deductions |
| i. _____ Promissory note | 9. Things a bank does to help people |
| j. _____ Payroll receipt | |
| k. _____ Depositor | |
| l. _____ Balance | |
| m. _____ Deposit slip | |
| n. _____ Net pay | |
| o. _____ Gross pay | |
| p. _____ Dependent | |
| q. _____ Average balance | |

10. The percent of the principal the bank charges as interest
11. Money put in a bank in a special place (not a checking account)
12. Money a person places in a bank, and then can take out by writing checks
13. The "rent" paid for the use of another's money
14. The amount of money kept in a checking account during a period of time
15. A paper the borrower signs, promising to repay money borrowed by a certain date
16. A person who puts money into a bank account
17. Salary before taxes
18. The per cent being charged on the principal

2. Banking procedures

A. List the four steps to open a checking account.

1.

2.

3.

4.

B. Write TRUE or FALSE in the blank to the left of each statement.

- _____ a. To take money from a checking account, the customer must write a check.
- _____ b. The checking account lets a person accumulate over a period of time, interest on the principal.
- _____ c. The savings account is an instrument that lets the bank's customers borrow a certain sum of money without charging them interest.
- _____ d. Banks usually charge a monthly service charge to help maintain accounts.
- _____ e. The service charge at some banks depends on the customer's average daily balance.

3. Figuring interest

Match the terms on the left with the best definitions or formulas.

- | | |
|--|---|
| a. _____ Compound interest | 1. Interest figured on both the principal and the interest earned |
| b. _____ Simple interest | |
| c. _____ Revolving interest charge | |
| d. _____ Noninstallment credit account | |
| e. _____ Installment credit account | |

2. $\text{Interest} = \text{Principal} \times \text{Rate} \times \text{Time}$
3. $\text{Monthly principal} = \text{Original debt} \div \text{Number of payments}$
4. Paying the full price of an item with no interest being charged
5. Has credit limits and normally high interest rates
6. Annual percentage

4. Employment fees

Write TRUE or FALSE in the blank to the left of each statement.

- a. ☐ State employment agencies charge a set fee.
- b. ☐ Private employment agencies have no set fee.
- c. ☐ Some private agencies require the individual to pay 100% of the employment fee.
- d. ☐ Some employers pay 100% of the employment fees.
- e. ☐ The applicant is required to sign a contract when using a private agency.

5. Payroll receipts

A. State three ways of determining a person's salary.

- 1.
- 2.
- 3.

B. Place either true (T) or false (F) in the blank to the left of each statement.

- ☐ 1. Withholding tax is another name for income tax.
- ☐ 2. Social Security provides benefits to dependents only upon the worker's death.

- _____ 3. Almost all companies have some form of savings through payroll deductions.
- _____ 4. The only way to purchase United States Savings Bonds is through a bank.
- _____ 5. Some companies will deduct insurance payments from the employee's salary.

C. Using the information below determine the hourly pay and the overtime pay.

Rate per hour	\$3.00	\$3.00 x 1.5 =	\$ _____
Number hours	x 40	Overtime rate	\$ _____
Regular pay		Overtime hours	X 10
Overtime pay	+	Overtime pay	\$ _____
Gross pay			

D. Using the following information, compute the Social Security and the income tax deductions.

\$4.00	Rate per hour	<u>Income tax</u>	
x 40	Number hours		
	Regular pay		Regular pay
		x .16	Income tax
<u>Social Security</u>			
	Regular pay		
x _____	FICA		Social Security
		+	Income tax
			Total deduction
_____	Deduction		

6. Complete new account cards used in banking
7. Identify check stub information
8. Complete a deposit receipt
9. Complete a check
10. Compute single interest on an account
11. Compute simple interest on a promissory note

12. Figure monthly payments on an installment credit account
13. Determine employment fees
14. Figure salary
15. Determine standard deductions.

(Note: If these activities have not been accomplished prior to the test, ask the instructor when they should be completed.)

UNIT I
CONSUMER MATHEMATICS

ANSWERS TO UNIT TEST

1. Terms and definitions

a. 9b. 12c. 3d. 11e. 13f. 4g. 10h. 2i. 15j. 5k. 16l. 6m. 1n. 8o. 17p. 7q. 14

2. Banking procedures

- A. 1. The depositor must fill out a personal information card at the New Accounts Department.
- 2. The depositor is required to sign a signature card.
- 3. The depositor is required to fill out a deposit slip before putting money into the account.
- 4. To take out money, the customer may write a check not to exceed the balance
- B. True a.
- False b.
- False c.
- True d.
- True e.

3. Figuring interest

- a. 1
- b. 2
- c. 5
- d. 4
- e. 3

4. Employment fees

- a. False
- b. True
- c. True
- d. True
- e. True

5. Payroll receipts

- A. 1. Hourly salary
- 2. Straight salary
- 3. Piece work

- B. T 1.
 F 2.
 T 3.
 F 4.
 T 5.

C.	Rate per hour	\$ 3.00	$3.00 \times 1.5 =$	\$ 4.50
	Number hours	x 40	Overtime rate	4.50
	Regular pay	<u>120.00</u>	Overtime hours	x 10
	Overtime pay	+ 45.00	Overtime pay	<u>\$45.00</u>
	Gross pay	\$165.00		

D.	\$ 4.00	Rate per hour	<u>Income Tax</u>
	x 40	Number hours	
	\$160.00	Regular pay	\$160.00 Regular pay
			x .16 Income tax
			<u>\$ 25.60</u> Deduction

Social Security

\$ 160.00	Regular pay	\$ 9.80	Social Security
x .0613	FICA	+ 25.60	Income tax
<u>48000</u>		<u>\$35.40</u>	Total deduction
16000			
<u>96000</u>			
\$9.808000	Deduction		

\$9.81 (Rounded off)

6-15. Evaluated to the satisfaction of the instructor.

UNIT II

STOCK RECORD CONTROL

UNIT OBJECTIVE

After completing this unit, the student should be able to identify and explain terms dealing with stock record control. The student should also understand the three filing procedures and be familiar with completing purchase requisitions, stock requests, and stock record cards. This knowledge will be evidenced through demonstration and by successfully completing a unit test.

SPECIFIC OBJECTIVES

After completing this unit of instruction, the student should be able to:

1. Match terms relating to stock record control with the correct definition
2. List the three methods of filing inventory cards
3. Identify true statements concerning the receiving report
4. Describe briefly the three steps to be followed when shipping merchandise from inventory
5. Identify true statements concerning purchase requisitions
6. Demonstrate the ability to:
 - a. File in alphabetical order
 - b. File in numerical order
 - c. File company names and stock numbers using both alphabetical and numerical order
 - d. Complete receiving reports
 - e. Complete stock requests
 - f. Complete stock cards

UNIT II

STOCK RECORD CONTROL

SUGGESTED ACTIVITIES

- I. Instructor
 - A. Provide objective sheet
 - B. Discuss objective sheet
 - C. Pass out information sheet
 - D. Discuss information sheet
 - E. Review units on alphabetic and numeric filing
 - F. Make and show transparencies
 - G. Distribute and discuss assignment sheets
 - H. Demonstrate procedures outlined in assignment sheets
 - I. Give test and review any questions missed
- II. Student
 - A. Read and discuss objective sheet
 - B. Read and discuss material contained in information sheet
 - C. Review material on transparencies
 - D. Complete assignment sheets
 - E. Take test

INSTRUCTIONAL MATERIALS

- I. Included in this unit:
 - A. Objective sheet
 - B. Information sheet
 - C. Transparency masters
 - 1. II-TM-1--Stock Record Card

2. II-TM-2--Receiving Report
3. II-TM-3--Purchase Requisition
4. II-TM-4--Stock Request

D. Assignment sheets

1. Assignment Sheet #1--Filing in Alphabetical Order
2. Assignment Sheet #2--Filing in Numerical Order
3. Assignment Sheet #3--Filing Companies and Stock Numbers Using Both Numerical and Alphabetical Order
4. Assignment Sheet #4--Completing Receiving Reports
5. Assignment Sheet #5--Completing Stock Request
6. Assignment Sheet #6--Completing Stock Cards

E. Answers to assignment sheets

F. Test

G. Answers to test

II. References

- A. Huffman, Harry and Jeffrey R. Stewart, Jr. General Recordkeeping. 7th ed. New York: Gregg Division, McGraw-Hill Book Company, 1976.
- B. Cotton, Joseph L., Judy Lima and Donald B. Koeppen. Houston House Employee's Handbook. New York: Gregg Division, McGraw-Hill Book Company, 1976.
- C. Baron, Harold and Solomon C. Steinfeld. Clerical Record Keeping. 3rd ed. Cincinnati: South-Western Publishing Co., 1971.
- D. Meehan, James R., William R. Pasewark and Mary Ellen Oliverio. Clerical Office Procedure. 5th ed. Cincinnati: South-Western Publishing Co., 1971.
- E. Huffman, Harry, Ruth M. Twiss and Harold H. Williams. Math For Business Careers. 4th ed. New York: Gregg and Community College Division, McGraw-Hill Book Company, 1975.

F. Albertson, Dorothy Lee. Stock Control Clerk Training Manual. New York: Gregg Division, McGraw-Hill Book Company, 1973.

UNIT II
STOCK RECORD CONTROL

INFORMATION SHEET

I. Terms and definitions

- A. Stock or inventory--The materials that must be kept on hand for a business to operate smoothly
- B. Perpetual inventory--A record which shows every receipt or shipment, and which shows how much of each item is on hand
- C. Minimum level--The least number of items that can be kept in stock for the business to be able to operate
- D. Maximum level--The most stock that can be kept on hand
- E. Receiving report--A record of incoming merchandise (TM-2)
- F. Purchase requisition--A form used by the company to order new merchandise (TM-3)
- G. Balance--The amount of material on hand
- H. Stock request--Written order used to get material from stockroom (TM-4)

II. Locating cards

- A. Cards can be filed alphabetically by company name

Example: Harry Brown Company
John Jones Company
Sam White Company

Example: Max Taylor Company
Max V. Taylor Company
Max X. Taylor Company

- B. Cards can be filed numerically by stock number using the first digit

Example: 34-8967 56-2842
 44-8967 57-2684

- C. If there are several stock numbers with the same company, cards may be filed combining both methods.

1. First, file the cards alphabetically.
2. Then put the cards in numerical order within the alphabetical group.

Example: Max Taylor Company stock #28-6342
 Max Taylor Company stock #28-8342
 Max Taylor Company stock #29-2644
 Max Taylor Company stock #30-1266

III. Receiving Report

- A. Compare the receiving report with the purchase requisition to see if the amount of merchandise is correct
- B. Make sure the report includes the correct stock number and what has been ordered
- C. Enter the receiving report in the IN column and add to the balance on hand
- D. When merchandise is received, place old stock in front of the new

IV. Shipping the Merchandise from Inventory

- A. Send written stock request to the stock room when merchandise is needed
- B. Post the shipment in the OUT column when merchandise has been shipped
- C. Then subtract the amount of merchandise shipped from the balance

V. Ordering Merchandise

- A. Each piece of merchandise has a maximum and minimum amount to be kept in stock
- B. When the merchandise falls below the minimum level, it must be reordered

(NOTE: To find the amount to be ordered, subtract the current balance from the maximum.)

- C. To place an order, send a purchase request, stating the amount of merchandise needed, to the manufacturer

RECEIVING REPORT

RECEIVING REPORT NO. 1256

RECEIVED FROM _____

DATE _____

PO NO. _____ PR NO. _____

QUANTITY RECD	QUANTITY RET	BACK ORDER	PART NO.	DESCRIPTION

PARTS RECEIVED IN GOOD CONDITION _____

PURCHASE REQUISITION

PURCHASE REQUISITION			NO.
SUPPLIER _____			DATE: _____
_____			REQUESTED BY: _____

QUANTITY		SUPPLIER'S CATALOG NUMBER	DESCRIPTION	OUR STOCK NUMBER	UNIT PRICE
ON HAND	TO ORDER				

ORIGINAL COPY

STOCK REQUEST

STOCK REQUISITION NO. 78-B					
LESSEE _____			DATE _____		
_____			SERVICE REP. _____		
_____			REQUESTED BY: Phone ☐		
			Mail ☐		
			in Person ☐		
QUANTITY REQ.	QUANTITY SENT	MANUFACTURER	PART NO.	DESCRIPTION	BACK ORDER
DATE PROCESSED _____					

UNIT II

STOCK RECORD CONTROL

ASSIGNMENT SHEET #1--FILING IN ALPHABETICAL ORDER

Directions: Place the following company names in alphabetical order.

(NOTE: For more information on filing, see Vol. I, units XII, XIII, XIV, and XV.)

1. Paul Jacobs, Inc.
2. Lewis Terry Company
3. Bostick and Company
4. Stamp and Associates
5. Wallace Engineers
6. Benson, Inc.

UNIT II

STOCK RECORD CONTROL

ASSIGNMENT SHEET #2--FILING IN NUMERICAL ORDER

Directions: Place the following stock numbers in numerical order.

1. 39-9064
2. 62-3022
3. 69-4669
4. 30-8366
5. 29-76
6. 29-7964
7. 30-8367
8. 29-7963
9. 60-6052
10. 39-9110

UNIT II

STOCK RECORD CONTROL

ASSIGNMENT SHEET #3--FILING COMPANY NAMES AND STOCK NUMBERS,
USING BOTH NUMERICAL AND ALPHABETICAL ORDER

Directions: Place the following companies and stock numbers
in the proper order.

1. Paul Jacobs, Inc., stock number #65-023
2. Wallace Engineers, stock number #52-088
3. Stamp and Associates, stock number #43-062
4. Paul Jacobs, Inc., stock number #64-963
5. Paul Jacobs, Inc., stock number #63-166
6. Wallace Engineers, stock number #53-666
7. Wallace Engineers, stock number #54-790
8. Stamp and Associates, stock number #45-666

UNIT II

STOCK RECORD CONTROL

ASSIGNMENT SHEET #4--COMPLETING RECEIVING REPORTS

Directions: Complete the following receiving report.

Received from--Hale, Inc.

Date--June 1, 1978

Purchase Order--98

Purchase Requisition--19

Quantity Received--17

Back Order--2

Part Number--35-621

Description--U-Joint

Parts received in good condition-- Yes

RECEIVING REPORT NO. 1256				
RECEIVED FROM _____			DATE _____	
PO NO. _____		PR NO. _____		
QUANTITY RECD	QUANTITY RET	BACK ORDER	PART NO.	DESCRIPTION

PARTS RECEIVED IN GOOD CONDITION _____

UNIT II

STOCK RECORD CONTROL

ASSIGNMENT SHEET #5--COMPLETING STOCK REQUEST

Directions: Complete the following stock request.

Lessee--Jones Company
1682 14th Street
Kansas City, Missouri 88228

Date--June 1, 1978
Service Representative--Charles Smith
Requested by--phone
Quantity requested--64
Quantity sent--60
Manufacturer--Wilcox
Part Number--6-2
Description--T-Joint
Back order--4

STOCK REQUISITION NO. 78-B					
LESSEE _____ _____ _____			DATE, _____ SERVICE REP. _____ REQUESTED BY: Phone ☐ Mail ☐ in Person ☐		
QUANTITY REQ.	QUANTITY SENT	MANUFACTURER	PART NO.	DESCRIPTION	BACK ORDER

DATE PROCESSED _____

UNIT II

STOCK RECORD CONTROL

ASSIGNMENT SHEET #6--COMPLETING STOCK CARDS

Directions: Complete the following stock card, decide the amounts to be ordered, and complete a requisition.

Transparency #1

manufacturer's name: Edwards, Inc.
 part number: 6280
 item: bolt
 maximum: 300
 minimum: 100

Date	Quantity Received	Quantity Issued	Balance
6/3			200
6/4	25		225
6/6	20		245
6/10		75	170
6/15		80	90

STOCK RECORD CARD			
ITEM _____		MAXIMUM _____	
STOCK NO. _____		MINIMUM _____	
DATE	QUANTITY RECEIVED	QUANTITY ISSUED	BALANCE

UNIT II
STOCK RECORD CONTROL

ANSWERS TO ASSIGNMENT SHEETS.

ASSIGNMENT SHEET #1--FILING IN ALPHABETICAL ORDER

1. Benson, Inc.
2. Bostick and Company
3. Paul Jacobs, Inc.
4. Stamp and Associates
5. Lewis Terry Company
6. Wallace Engineers

ASSIGNMENT SHEET #2--FILING IN NUMERICAL ORDER

1. 29-76
2. 29-7963
3. 29-7964
4. 30-8366
5. 30-8367
6. 39-9064
7. 39-9110
8. 60-6052
9. 62-3022
10. 69-4669

ASSIGNMENT SHEET #3--FILING COMPANY AND STOCK NUMBERS,
USING BOTH NUMERICAL AND ALPHABETICAL
ORDER

1. Paul Jacobs, Inc. #62-166
2. Paul Jacobs, Inc. #64-963
3. Paul Jacobs, Inc. #65-023
4. Stamp and Associates #43-062
5. Stamp and Associates \$45-666
6. Wallace Engineers #53-088
7. Wallace Engineers #53-666
8. Wallace Engineers #54-790

ASSIGNMENT SHEET #4--COMPLETING RECEIVING REPORTS

RECEIVING REPORT NO. 1256				
RECEIVED FROM <u>Hale, Inc.</u>				DATE <u>6-1-78</u>
PO NO. <u>98-1</u> PR NO. <u>19</u>				
QUANTITY RECD	QUANTITY RET	BACK ORDER	PART NO.	DESCRIPTION
17		2	35-621	U-Joint
PARTS RECEIVED IN GOOD CONDITION <u>Yes</u>				

ASSIGNMENT SHEET #5--COMPLETING STOCK REQUEST

STOCK REQUISITION NO. 78-B					
LESSEE <u>Jones Company</u>			DATE <u>6-1-78</u>		
<u>1682 14th Street</u>			SERVICE REP. <u>Chas. Smith</u>		
<u>Kansas City, Missouri</u>			REQUESTED BY: Phone ☒		
88228			Mail ☐		
			in Person ☐		
QUANTITY REQ.	QUANTITY SENT	MANUFACTURER	PART NO.	DESCRIPTION	BACK ORDER
64	60	Wilcox	6-2	T-Joint	4
DATE PROCESSED _____					

ASSIGNMENT SHEET #6--COMPLETING STOCK CARDS

STOCK RECORD CARD				
ITEM		bolt		MAXIMUM 300
STOCK NO.		6280-1		MINIMUM 100
DATE		QUANTITY RECEIVED	QUANTITY ISSUED	BALANCE
6-3	78			200
6-4	78	25		225
6-6	78	20		245
6-10	78		75	170
6-15	78		70	100

UNIT II
STOCK RECORD CONTROL

UNIT TEST

1. Match terms on the left with their correct definitions by placing the number in the space provided

- | | |
|-------------------------------|---|
| _____ a. stock or inventory | 1. A record of incoming merchandise |
| _____ b. perpetual inventory | 2. A form used whenever inventory is to be taken from current supply |
| _____ c. minimum level | 3. The amount of material in stock |
| _____ d. maximum level | 4. The materials that must be kept in stock for a business to operate smoothly |
| _____ e. receiving report | 5. The least number of items that can be kept in stock for the company to operate |
| _____ f. purchase requisition | 6. A form used by the company to order new merchandise |
| _____ g. balance | 7. A record which shows every receipt or shipment, and which shows amount on hand |
| _____ h. stock request | 8. The most stock that can be kept on hand |

2. List the three methods of filing inventory cards

- a.
- b.
- c.

3. Place a T to the left of each correct statement
 - _____ a. When the merchandise is received, place the old stock in front of the new
 - _____ b. Enter the receiving report in the IN column and subtract from the balance
 - _____ c. Check carefully to determine if the stock number is correct and includes what had been ordered
 - _____ d. Compare the receiving report with the purchase requisition to see if the amount of merchandise is correct

4. Describe briefly the three steps when shipping merchandise from inventory
 - a.
 - b.
 - c.

5. Write TRUE or FALSE at the left of each statement
 - _____ a. Each piece of merchandise has a maximum and minimum amount to be kept in stock
 - _____ b. If the amount of merchandise falls below the minimum level, it must be reordered
 - _____ c. When placing an order, a stock report must be sent to the manufacturer stating the amount of merchandise that is to be ordered
 - _____ d. To find the amount of merchandise that needs to be ordered, add the current balance to the maximum

6. Demonstrate the ability to:
 - a. File in alphabetical order
 - b. File in numerical order
 - c. File company names and stock numbers, using both alphabetical and numerical order

- d. Complete receiving reports
- e. Complete stock request
- f. Complete stock cards

(Note: If these activities have not been accomplished prior to the test, ask the instructor when they should be completed.)

UNIT II
STOCK RECORD CONTROL

ANSWERS TO UNIT TEST

1. 4 a.
7 b.
5 c.
8 d.
1 e.
6 f.
3 g.
2 h.
2. a. alphabetically
b. numerically
c. combination using both alphabetically and numerically
3. T a.
F b.
T c.
T d.
4. a. A written stock request is sent to the stockroom when merchandise is needed
b. Post the shipment in the OUT column when merchandise has been shipped
c. Then subtract the merchandise shipped from the balance
5. T a. F c.
T b. F d.
6. Evaluated to the satisfaction of the instructor

UNIT III

PAPER CHARACTERISTICS AND CLASSIFICATIONS

UNIT OBJECTIVE

After completing this unit, the student should be able to identify and explain terms dealing with paper characteristics and classifications. The student should also be familiar with the tear test and the fold test. This knowledge will be evidenced through demonstration and by successfully completing a unit test.

SPECIFIC OBJECTIVES

After completing this unit of instruction, the student should be able to:

1. Briefly define terms relating to the characteristics of paper
2. Match terms relating to the classifications of paper with the correct definition
3. Complete statements, in a few words, dealing with the characteristics of paper
4. Complete statements, by filling in the blanks, dealing with the classifications of envelopes
5. Complete the fold test and tear test
6. Identify envelope styles
7. Label the effects of moisture on paper

UNIT III

PAPER CHARACTERISTICS AND CLASSIFICATIONS

SUGGESTED ACTIVITIES

I. Instructor:

- A. Provide objective sheet
- B. Discuss objective sheet
- C. Pass out information sheet
- D. Discuss information sheet
- E. Review units on alphabetic and numeric filing
- F. Make and show transparencies
- G. Distribute and discuss assignment sheets
- H. Demonstrate procedures outlined in assignment sheets
- I. Give test and review any questions missed

II. Student:

- A. Read and discuss objective sheet
- B. Read and discuss material contained in information sheet
- C. Review material on transparencies
- D. Complete assignment sheets
- E. Take test

INSTRUCTIONAL MATERIALS

I. Included in this unit:

- A. Objective sheet
- B. Information sheet
- C. Transparency masters
 - 1. III-TM-1--Tear Test and Fold Test

2. III-TM-2--Stretching, Curling, Shrinking and Wavy Edges

3. III-TM-3--Envelope Styles

D. Assignment sheets

1. Assignment Sheet #1--Completing the Fold Test and Tear Test

2. Assignment Sheet #2--Envelope Styles

3. Assignment Sheet #3--Stretching, Curling, Shrinking, and Wavy Edges

E. Answers to assignment sheets

F. Unit test

G. Answers to unit test

II. Reference--Pocket Pal. 9th ed. New York: International Paper Company, 1966.

UNIT III

PAPER CHARACTERISTICS AND CLASSIFICATIONS

INFORMATION SHEET

I. Paper Characteristics--Some things which influence paper quality and printing ability are:

A. Grain--The direction in which the paper fibers run while the sheet is being made

1. A sheet of paper will fold easily along the grain but may crack when folded against the grain

2. In offset printing, paper is usually ordered grain long

(NOTE: This means that the grain direction is parallel to the press cylinders)

3. The two methods for finding the grain are:

a. The tear test--Paper torn with the grain will tear easily and uniformly; paper torn against the grain will tear raggedly and unevenly

b. The fold test--Paper folded with the grain gives a smooth crease; paper folded against the grain is rough and tends to crack (Refer to TM #1) on the crease

B. Basis weight--The weight of paper in pounds cut to the basis size

Example #1: The basis size of book paper is 25 x 38 inches

Example #2: Basis 70 means that 500 sheets of 25 x 38-inch book paper will weigh 70 pounds

C. Color--Will differ between mills and brands

1. White ranges in many shades from cool to warm.

2. Type is easiest to read on soft white paper; process colors reproduce more sharply on bright white, and more accurately on true white than on other shades of paper.

- D. Strength--Depends on the type of fiber used, rather than the thickness of the paper
 - 1. High bursting strength is obtained when long pulp fibers are closely woven during the forming of a sheet
 - 2. High tensile strength is required when paper must withstand a great deal of tension
 - E. Stretch--The amount of distortion which paper undergoes during strain
 - F. Opacity--The amount of "show-through" of the printed image from the back side of the sheet or from the adjoining sheet
- II. Paper classification--Is made according to the use of the paper
- A. Bond--Is usually used for letters and business forms
 - B. Coated--Used to print pictures and photographs
 - C. Text--Often used for booklets, brochures, and announcements because of its texture and good color
 - D. Cover--Text paper which has been made into heavier weights to be used as covers for booklets
 - E. Book paper--Used in textbooks and is less expensive than text paper
 - F. Offset paper--Similar to book paper, with the exception that sizing is added to resist the moisture of offset printing
 - G. Index paper--Stiff and highly receptive to ink
 - H. Label paper--Smooth on one side for printing and rough on the opposite side so that an adhesive can be applied to it.
 - I. Newsprint paper--Used in newspapers; is usually made in a basis weight of 32 pounds
 - J. Tag--Usually made from waste paper and can be tinted on one or both sides; is easy to bend or fold

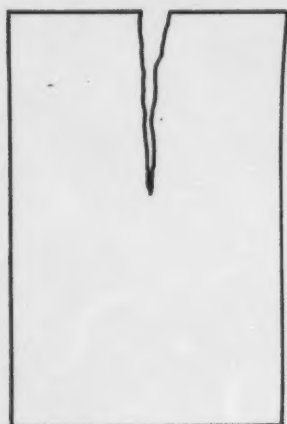
III. Paper moisture content--Has a great deal to do with the condition of the paper (Refer to TM #2)

- A. Paper becomes wavy across the grain when dry paper absorbs moisture at the exposed edges
- B. The edges of paper shrink when moist paper is in dry air
- C. Paper that is poorly made will often stretch and curl

IV. Envelope styles (Refer to TM #3)

- A. Commercial envelopes--Used for business correspondence and come in all standard sizes
- B. Window envelopes--Most commonly used for mailing invoices and statements
- C. Self-sealing--Have an adhesive on both the top and bottom flap and seal when put together
- D. Booklet, open-side--Most commonly used for mailing advertisements
- E. Baronial envelopes--Most commonly used for invitations and greeting cards
- F. Bankers flap and wallet flap--Stronger than other commercial envelopes and can hold a large amount of correspondence
- G. Clasp and string-and-button envelopes--Very strong and commonly used for mailing bulky papers
- H. Open-end envelopes--Normally used for mailing magazines and catalogs
- I. Expansion envelopes--Used for mailing bulky items and for package and rack sales

TEAR TEST

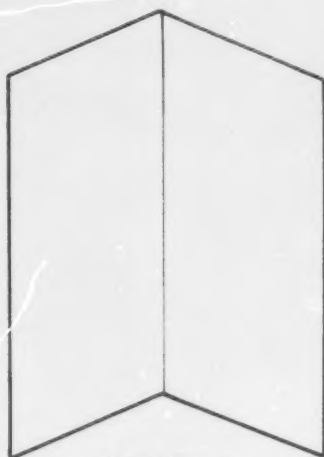


VERTICAL

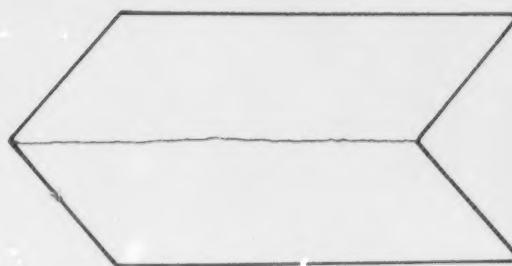


HORIZONTAL

FOLD TEST



VERTICAL

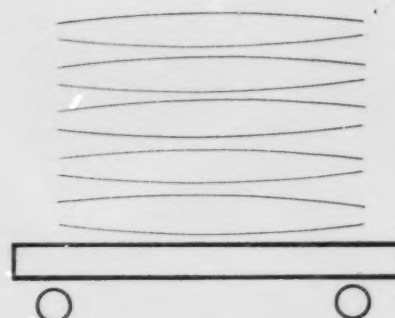


HORIZONTAL

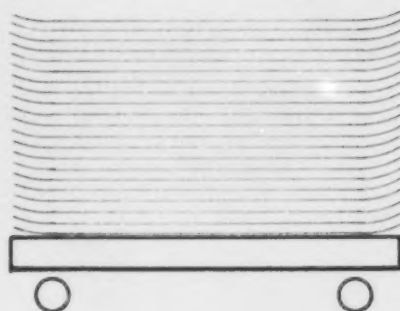
PAPER MOISTURE AND RELATIVE HUMIDITY



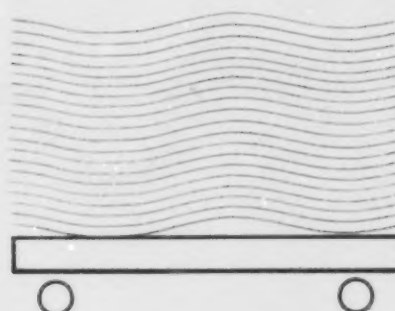
STRETCHING



SHRINKING

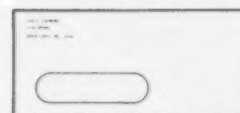
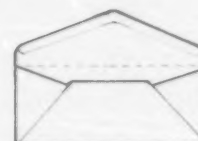
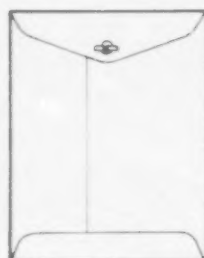
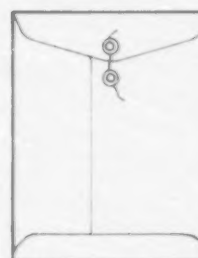


CURLING



WAVY EDGES

ENVELOPE STYLES

**COMMERCIAL****WINDOW****SELF-SEALING****BOOKLET, OPEN-SIDE****BARONIAL****BANKERS FLAP****WALLET FLAP****CLASP****STRING-AND-BUTTON****OPEN END****EXPANSION**

UNIT III

PAPER CHARACTERISTICS AND CLASSIFICATIONS

ASSIGNMENT SHEET #1--COMPLETING THE FOLD TEST
AND TEAR TEST

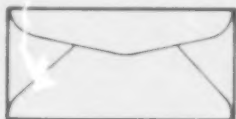
Directions: Have each student do a "tear test" and a "fold test," then make notes of the differences they observe. (Refer to Section I of Information Sheet and TM #1.)

1. Tear test:
 - a. Tear a sheet of paper that is horizontal to your desk
 - b. Tear a sheet of paper that is vertical to your desk
2. Fold test:
 - a. Fold a sheet of paper horizontally
 - b. Fold a sheet of paper vertically

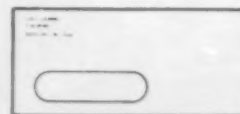
UNIT III
PAPER CHARACTERISTICS AND CLASSIFICATIONS

ASSIGNMENT SHEET #2--ENVELOPE STYLES

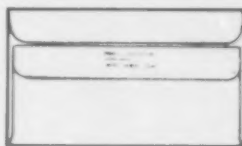
Directions: In the space provided, label each envelope style shown below.



A _____



B _____



C _____



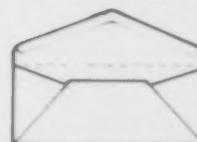
D _____



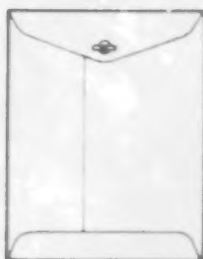
E _____



F _____



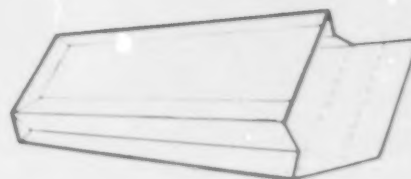
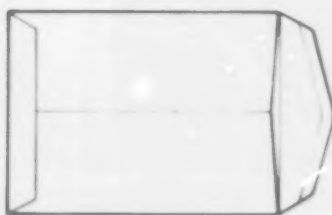
G _____



H _____



I _____

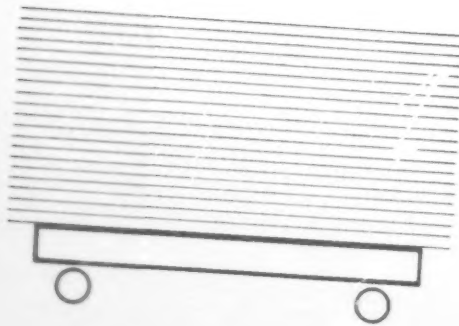


UNIT III

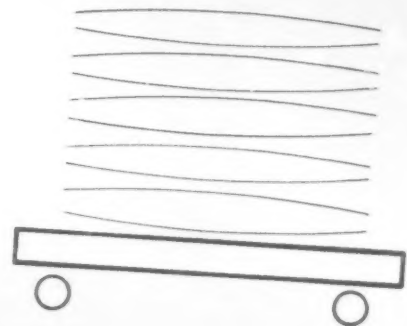
PAPER CHARACTERISTICS AND CLASSIFICATIONS

ASSIGNMENT SHEET #3--STRETCHING, CURLING, SHRINKING
AND WAVY EDGES

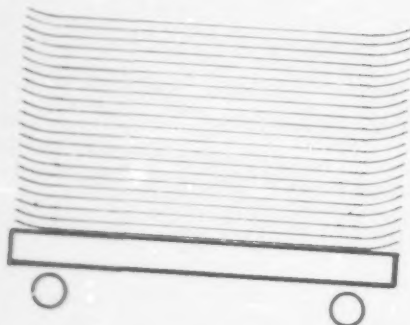
Directions: Label the type of effects that moisture has
on paper, using the spaces provided below.



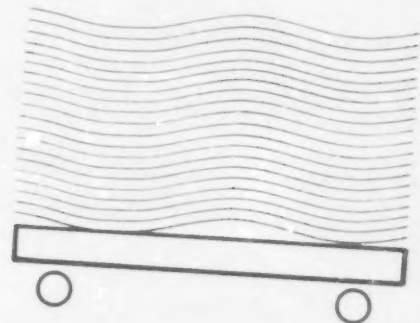
1. _____



3. _____



2. _____



4. _____

UNIT III

PAPER CHARACTERISTICS AND CLASSIFICATIONS

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1

1.
 - a. Will be ragged and uneven
 - b. Will tear more easily and be more uniform than if torn horizontally
2.
 - a. Is rough and tends to crack, giving a poor folding crease
 - b. Gives a more uniformly smooth crease and folds easily

Assignment Sheet #2

- A. Commercial
- B. Window
- C. Self-sealing
- D. Booklet, open-side
- E. Baronial
- F. Bankers flap and wallet flap
- G. Clasp and string-and-button
- H. Open end
- I. Expansion

Assignment Sheet #3

1. Stretching
2. Curling
3. Shrinking
4. Wavy edges

UNIT III
PAPER CHARACTERISTICS AND CLASSIFICATIONS

UNIT TEST

1. Briefly define the following terms:

- a. Grain--
- b. Basis weight--
- c. Stretch--
- d. Opacity--

2. Match terms on the left with their correct definitions by placing the number in the space provided.

- | | |
|-----------------------|---|
| _____ a. Bond paper | 1. Usually made in a basis weight of 32 pounds |
| _____ b. Coated paper | 2. Similar to book papers with exception that sizing is added to resist moisture |
| _____ c. Text paper | 3. Used for booklets, brochures and announcements because of its texture and appealing colors |
| _____ d. Cover paper | 4. Used in textbooks and costs less than text paper |
| _____ e. Book paper | 5. Usually used for letters and business forms |
| _____ f. Offset paper | 6. Used to print pictures and photographs |
| _____ g. Newsprint | |

7. Text papers which have been made into heavier weights
 8. Usually made from waste paper and can be tinted on one or both sides
 3. In a few words answer the following questions:
 - A. What results when dry paper absorbs moisture at the exposed edges?
 - B. What causes "stretching" and "curling"?
 4. Complete the following statements by filling in the blanks with the correct word or words.
 - a. _____ envelopes are used for all types of business correspondence and are made in all standard sizes.
 - b. _____ envelopes are most commonly used for invoices and statements.
 - c. _____ and string-and-button envelopes are strong and commonly used for mailing bulky papers.
 - d. _____ envelopes are used for especially large mailings.
 5. Complete the fold test and tear test.
 6. Identify envelope styles.
 7. Label the effects of moisture on paper.

(NOTE: If activities #5-#7 have not been completed prior to the test, ask the instructor when they should be completed.)

UNIT III
PAPER CHARACTERISTICS AND CLASSIFICATIONS

ANSWERS TO UNIT TEST

1.

- a. The direction in which the paper fibers run while the sheet is being made
- b. The weight of paper in pounds, cut to the basis size
- c. The amount of distortion which paper undergoes during strain
- d. The amount of "show-through" of the printed image from the back side of the sheet or from the adjoining sheet

2.

- a. 5
- b. 6
- c. 3
- d. 7
- e. 4
- f. 2
- g. 1

3.

- a. The paper becomes wavy across the grain
- b. Poorly made paper

4.

- a. Commercial
- b. Window
- c. Clasp
- d. Expansion

5-7 Evaluated to the satisfaction of the instructor

UNIT IV

IMMOVABLE CARRIAGE TYPEWRITER

UNIT OBJECTIVE

After completing this unit, the student should be able to identify terms and explain procedures used when inserting the paper, cleaning the type, and making carbon copies. The student should know how to use the immovable carriage typewriter letter keys and special keys. This knowledge will be evidenced by demonstrating the use of the immovable carriage typewriter and satisfactorily completing a unit test.

SPECIFIC OBJECTIVES

After completing this unit of instruction, the student should be able to:

1. Identify the various parts of the immovable carriage typewriter
2. Explain the two methods of paper insertion with the immovable carriage typewriter
3. Write the procedures involved with the two methods of type cleaning
4. Point out procedures in making carbon copies using the immovable carriage typewriter
5. Complete procedural statements on properly and neatly erasing errors
6. Sequence the steps in using the correction key on the immovable carriage typewriter
7. Identify the statements that are true concerning tab control
8. Locate points on the scale
9. Perform artyping exercises
10. Identify correct procedures to use when cleaning a typing element
11. Demonstrate the ability to:
 - a. Center type on a page

- b. Develop typing proficiency
- c. Use the variable line spacer
- d. Operate special keys on the immovable carriage typewriter

UNIT IV
IMMOVABLE CARRIAGE TYPEWRITER

SUGGESTED ACTIVITIES

I. Instructor

- A. Provide objective sheet
- B. Discuss objective sheet
- C. Pass out information sheet
- D. Discuss information sheet
- E. Make and show transparencies
- F. Demonstrate procedures outlined in job sheets
- G. Give test and evaluate results

II. Student

- A. Read and discuss objective sheet
- B. Read and discuss material contained in information sheet
- C. Complete assignment sheets and the job sheets
- D. Take test

INSTRUCTIONAL MATERIALS

I. Included in this unit:

- A. Objective sheet
- B. Information sheet
- C. Transparencies
 - 1. IV-TM-1--Carrier
 - 2. IV-TM-2--Top Components of the Immovable Carriage Typewriter
 - 3. IV-TM-3--Scale

4. IV-TM-4--Keyboard
5. IV-TM-5--Platen Components
6. IV-TM-6--Multiple Copy Control
7. IV-TM-7--Ribbon Components
8. IV-TM-8--Cleaning the Typing Element
9. IV-TM-9--Paper Insertion

D. Assignment sheets

1. Assignment Sheet #1--Locating Points on the Scale
2. Assignment Sheet #2--Artyping Exercises
3. Assignment Sheet #3--Cleaning the typing Element

E. Answers to Assignment sheets

F. Job sheets

1. Job Sheet #1--Centering
2. Job Sheet #2--Developing Typing Proficiency
3. Job Sheet #3--Using the Variable Line Spacer
4. Job Sheet #4--Using the Immovable Carriage Typewriter Special Keys

G. Unit test

H. Answer to unit test

II. References

1. The IBM "Selectric". . An Introductory Course. New York: International Business Machines Corporation, Office Products Division, Educational Services Department, 1964.
2. The IBM Correcting Selectric Typewriter. New York: International Business Machines Corporation, 1973.

UNIT IV

IMMOVABLE CARRIAGE TYPEWRITER

INFORMATION SHEET

I. Terms and definitions

- A. Carrier--Part of the typewriter which moves as you type and contains the following: (see TM-1)
 - 1. Typing element--Metal ball with letters on it which turns to type the key on the keyboard that is selected
 - 2. Clear view cardholder--Holds envelopes and cards against platen
 - 3. Ribbon cartridge--Container which holds the type ribbon
 - 4. Position indicator--Red arrow that shows the place of the carrier on the pitch indicator
 - 5. Impression control--Lever which adjusts the force of the element as it hits the paper (see TM-2)
- B. Top components of the immovable carriage typewriter (see TM-2)
 - 1. Right platen knob--Used to position paper in typewriter
 - 2. Paper release lever--Frees paper so it can be moved in typewriter
 - 3. Line spacing lever--Controls half, single, and double spacing
 - 4. Left platen knob--Used to change the line of spacing (also called variable line spacing)
 - 5. Multiple copy control--Adjusts the platen to allow for the thickness of paper
 - 6. Paper edge guide--Positions paper in the typewriter
 - 7. Paper bail lever--Moves the paper bail forward

8. Clear view cardholder--See A-2
9. Line scale--Used for horizontal alignment of the paper
10. Copy guide--Used to stop refeeding paper and acts as an erasing table. The bottom scale is the same as on the pitch indicator, and the top scale is an inch scale

C. Scale (see TM-3)

1. Left margin stop--Sets start point for line of typing
2. Right margin stop--Shows where line of type stops
3. Position indicator--Red arrow which shows where the carrier is on the pitch indicator and visible margin scale
4. Visible margin scale--Shows the space of either pica or elite type (also called pitch indicator)

D. Keyboard (see TM-4)

1. ON/OFF key--Controls power to the type-writer
2. Index key--Lets paper move to next line without changing carrier position. Also has repeat feature to move down several lines with one movement
3. Backspace--Allows single and repeat spacing to the left
4. Return key--Brings carrier to the left margin
5. Space bar--Gives blank space where needed
6. Hyphen and underscore--Provides hyphens and broken lines, and underlining when key is pressed down
7. Margin release key--Allows typing beyond either margin
8. Set and clear key--Allows to set and clear tabs

9. Shift key--Lets the element type a capital or the upper case shown on the key
10. Multiple character keys--Allows for different characters on several elements

E. Additional features (see TM-5)

1. Correcting key--Allows removing an error from typed copy
2. Express backspace key--Lets carrier move to the left on the same line without having to backspace

F. Ribbon Components (see TM-7)

1. Ribbon reverse lever--Allows ribbon to change direction
2. Ribbon position lever--Lever which allows you to choose to type on a certain portion of the ribbon
3. Ribbon stencil control--Lever which moves indicator to type with the ribbon or to type stencils
4. Ribbon load lever--Control which raises ribbon so that the ribbon case can be removed from typewriter

II. Methods of Paper Insertion (see TM-9)

A. Method I

1. Bring the paper bail lever forward and place the paper edge against the paper guide on the left side
2. Set the typewriter for spacing desired
3. Guide the paper with the left hand and use your right hand to operate the platen knob
4. Roll the paper until the top edge of the paper is one-half inch above the card holder for a one-inch top margin

B. Method II

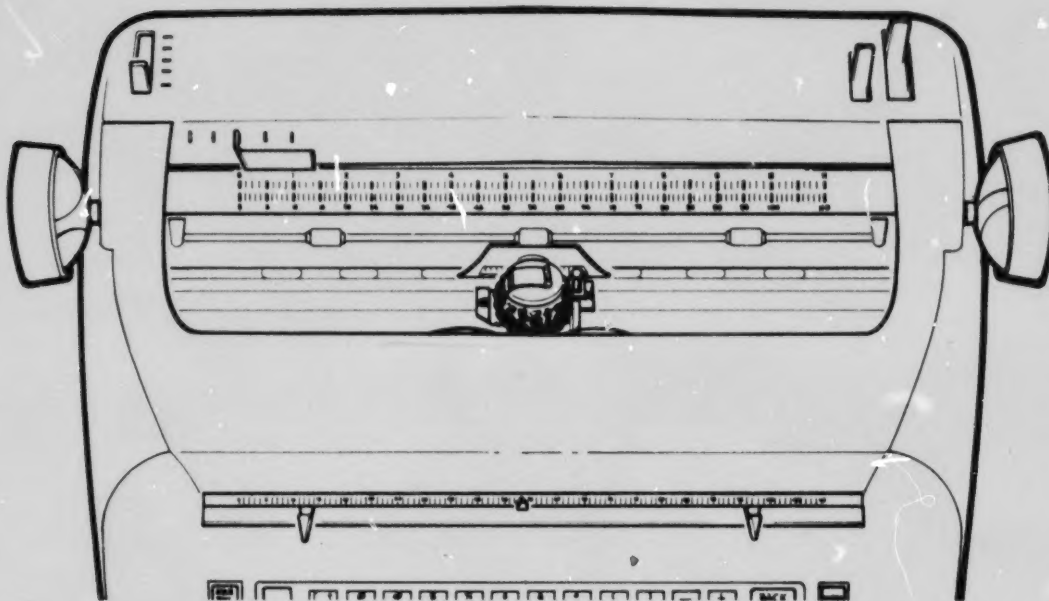
1. Position the paper behind the platen, after bringing the paper bail forward

2. Guide the paper with your left hand as your right little finger depresses the index key

III. Methods for type cleaning

- A. Method I--Place the ribbon on stencil position and strike all of the keys until there is no ink or carbon passing to the paper

(Note: Before removing the typing element, see that the carrier is centered, the cover is open, the motor is turned off, and the shift lock is not pressed down.)



B. Method II

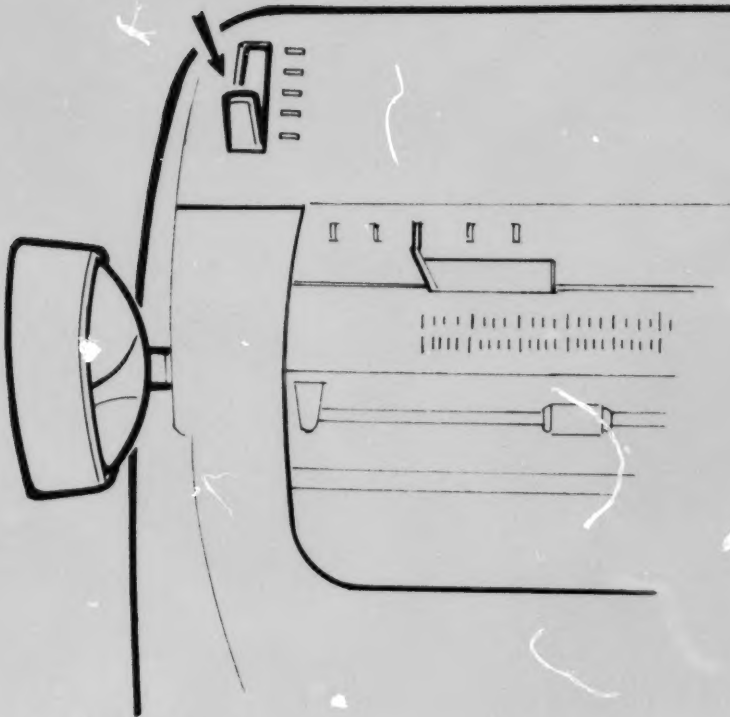
1. Remove the typing element according to the directions for your particular model of typewriter
2. Press the element's spring levers together and clip the element to a dual-purpose brush. Clean by brushing up and away from you



IV. Making Carbon Copies

- A. To allow for varying weights of the original copy paper and carbon paper, the platen is moved back by the copy control lever. This will minimize embossing on the original and will produce a clear impression on all copies.
- B. For one original copy and three carbon copies, set the copy control lever on the second mark. For one original and five carbon copies, the copy control lever should be set on the third mark.

(Note: The correct setting will depend on the thickness of the paper you use.)



V. Erasing (This applies to any typewriter)

A. Bond paper

1. For erasing on bond paper, use a standard typing eraser with a brush on the end
2. Roll up copy just far enough for easy access to the error and erase in a gentle, circular motion, dusting erasings frequently
3. Reposition the paper in the typewriter and type over your erased error

B. Carbon copies

1. To erase carbon copies, roll out copy just far enough for easy access to the error

2. Now place an index card or some other heavy paper between the sheet on which the error was made and the carbon paper.

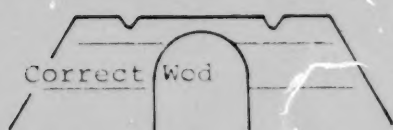
(Note: This is to prevent a dark mark on the back of the original from the carbon.)

3. Then continue to erase as described in Part "A"

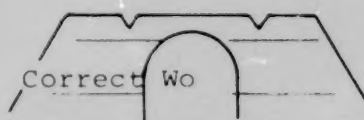
VI. Making Corrections with the Typewriter

- A. Backspace to the last incorrectly typed character by pressing the correcting key
- B. The incorrect character can now be removed by restriking the last incorrectly typed key
- C. Now type the correct character

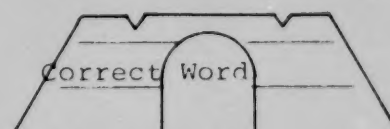
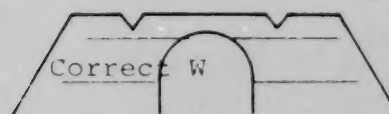
(Note: If carbon copies are being typed, correct them in the usual way after you have removed the error from the original.)



1.



2.



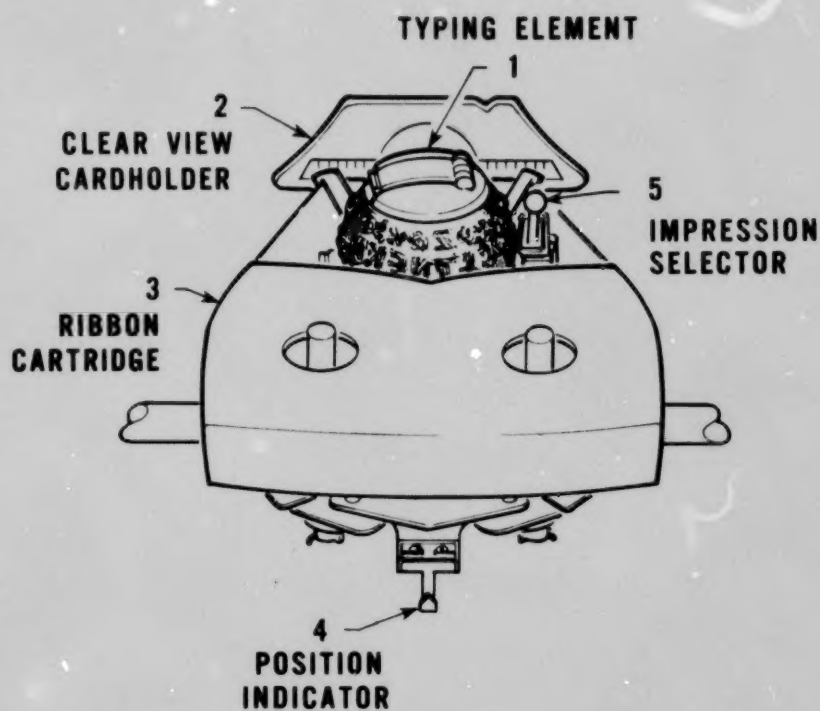
3.

VII. Using the Tab Key

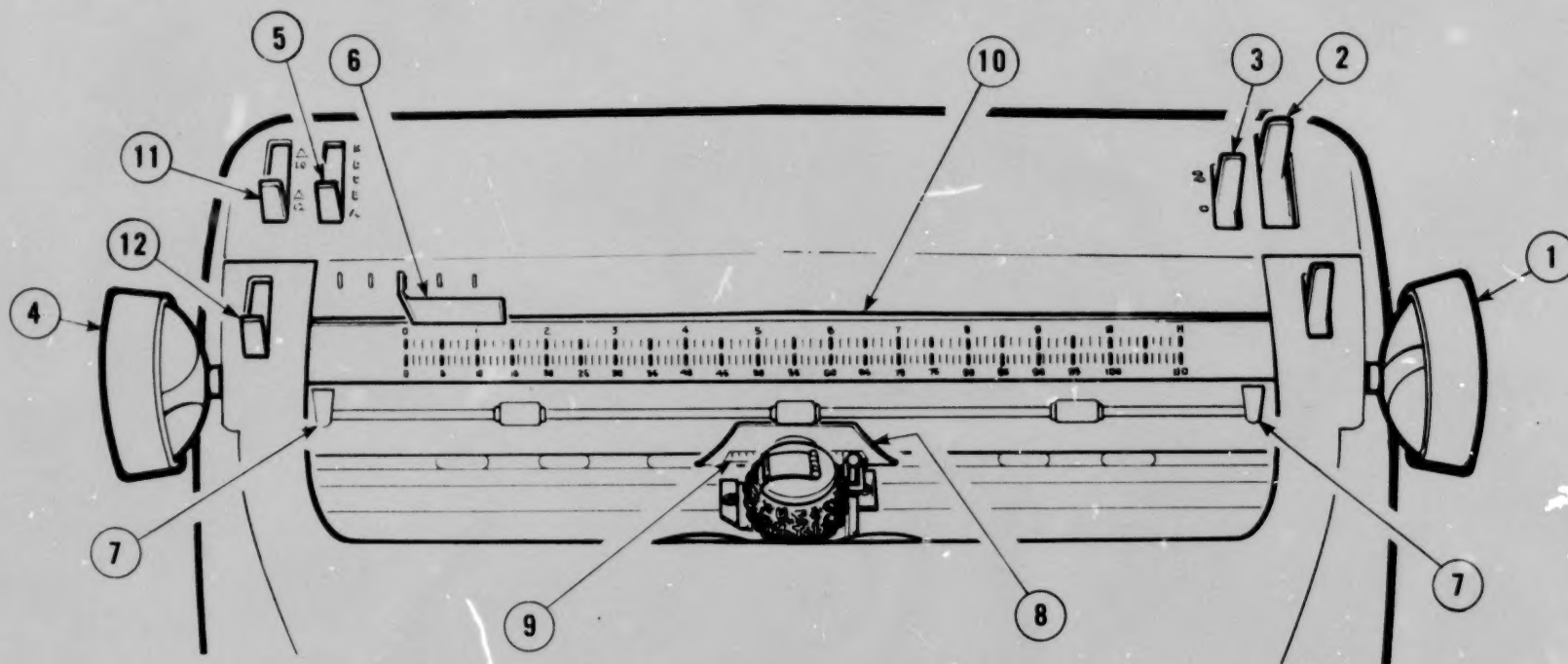
- A. The tab key operates through the right margin like the space bar

- B. A tab stop can be set at any point along the margin scale by moving the position indicator to the desired point and then pushing down on the "Set" end of the tab control
- C. If your typewriter has tab settings, clear by tabulating to each stop, and depressing the CLR (Clear) end of the tab control

THE CARRIER

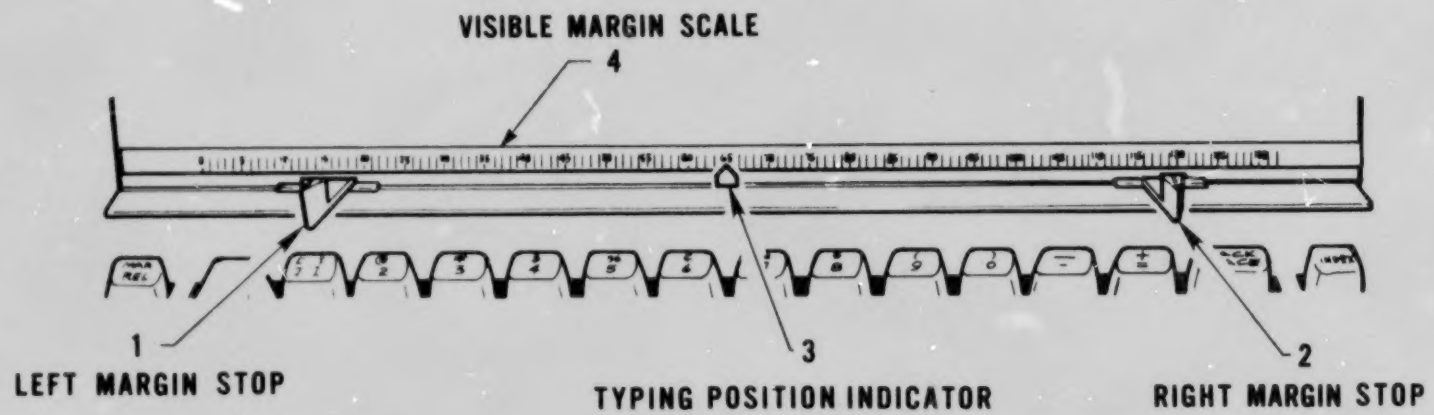


TOP COMPONENTS OF THE IMMOVABLE CARRIAGE TYPEWRITER

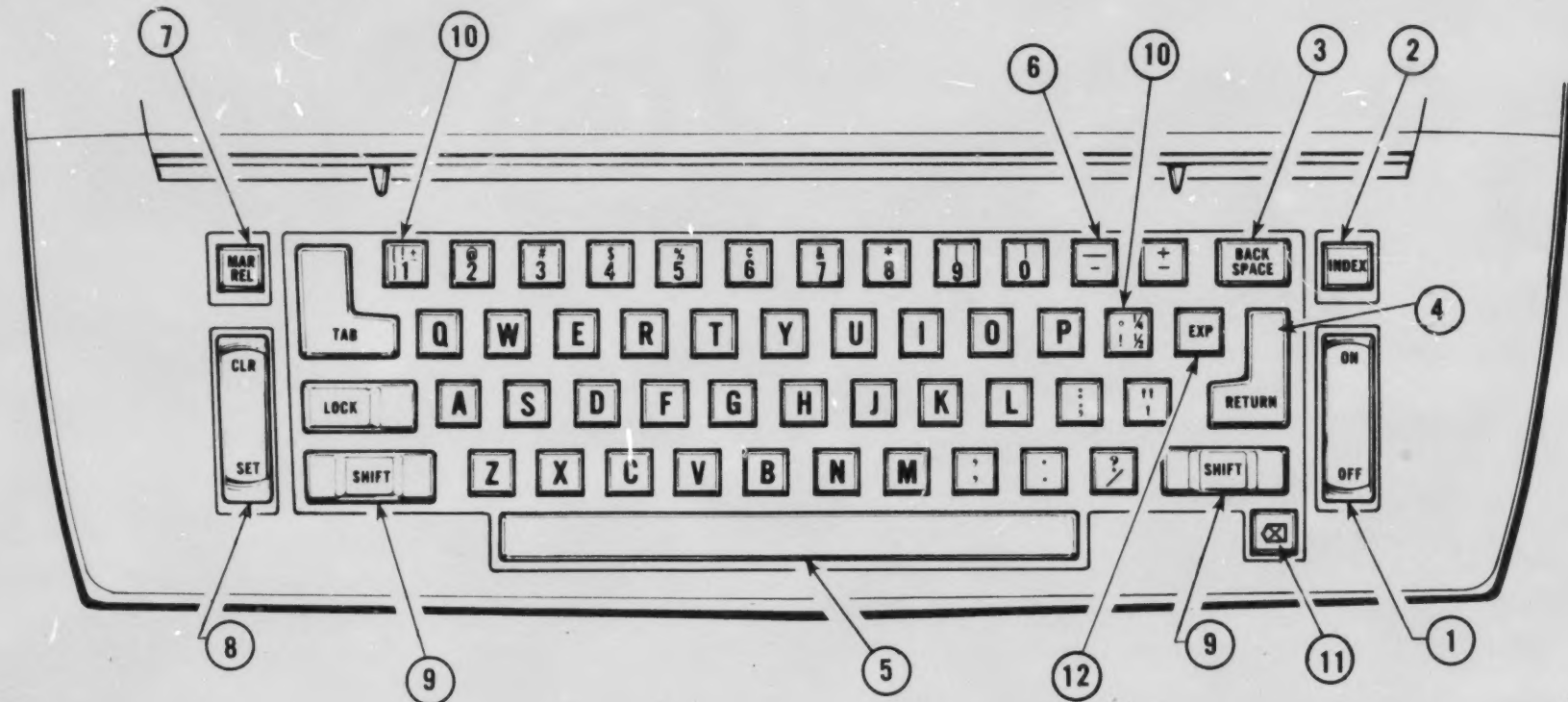


- | | |
|--|--------------------------|
| 1. Right platen knob | 7. Paper bail lever |
| 2. Paper release lever | 8. Clear view cardholder |
| 3. Line spacing lever | 9. Line scale |
| 4. Left platen knob
(Variable line spacing) | 10. Copy guide |
| 5. Multiple copy control | 11. Dual-Pitch lever |
| 6. Paper edge guide | 12. Half Backspace lever |

SCALE



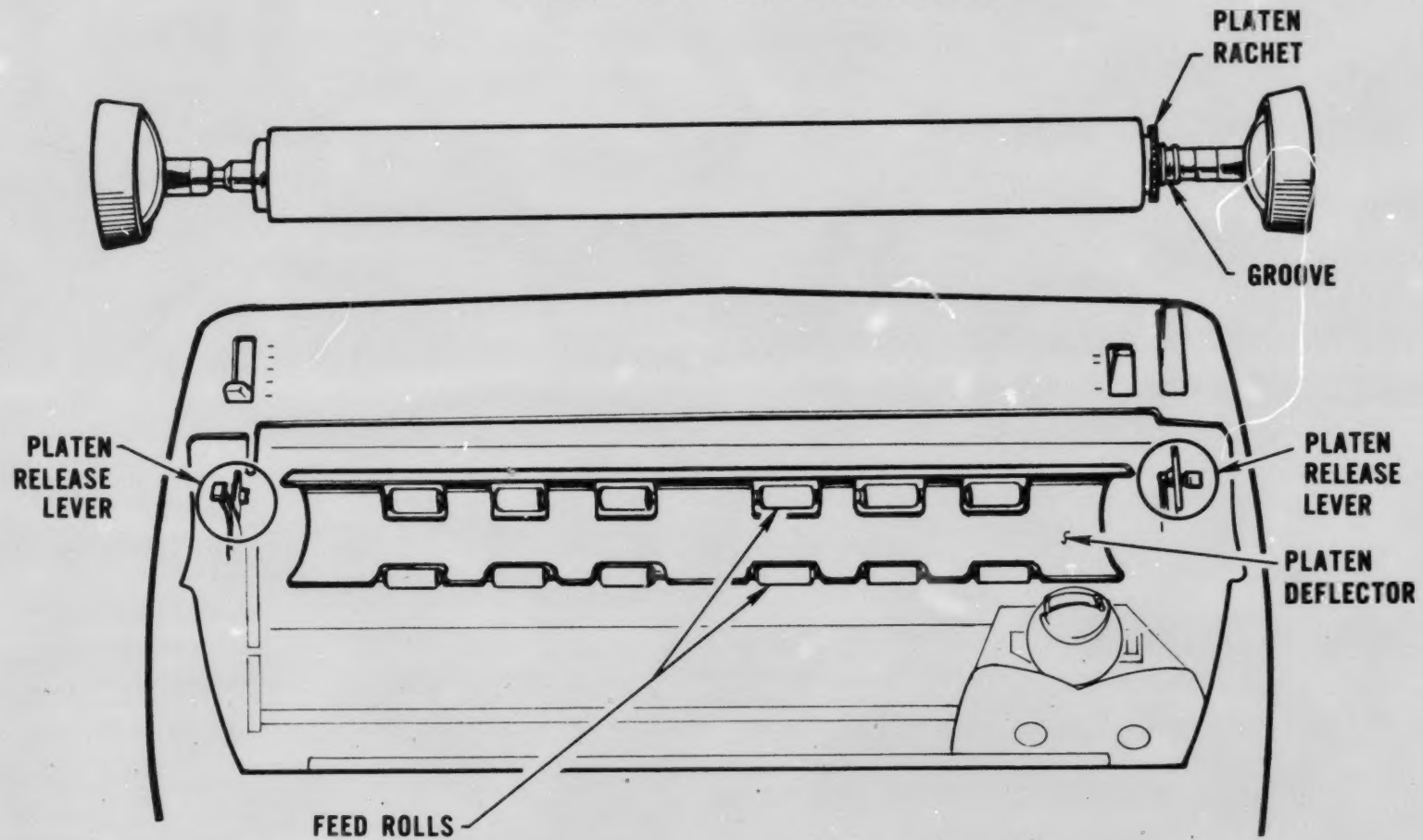
KEYBOARD



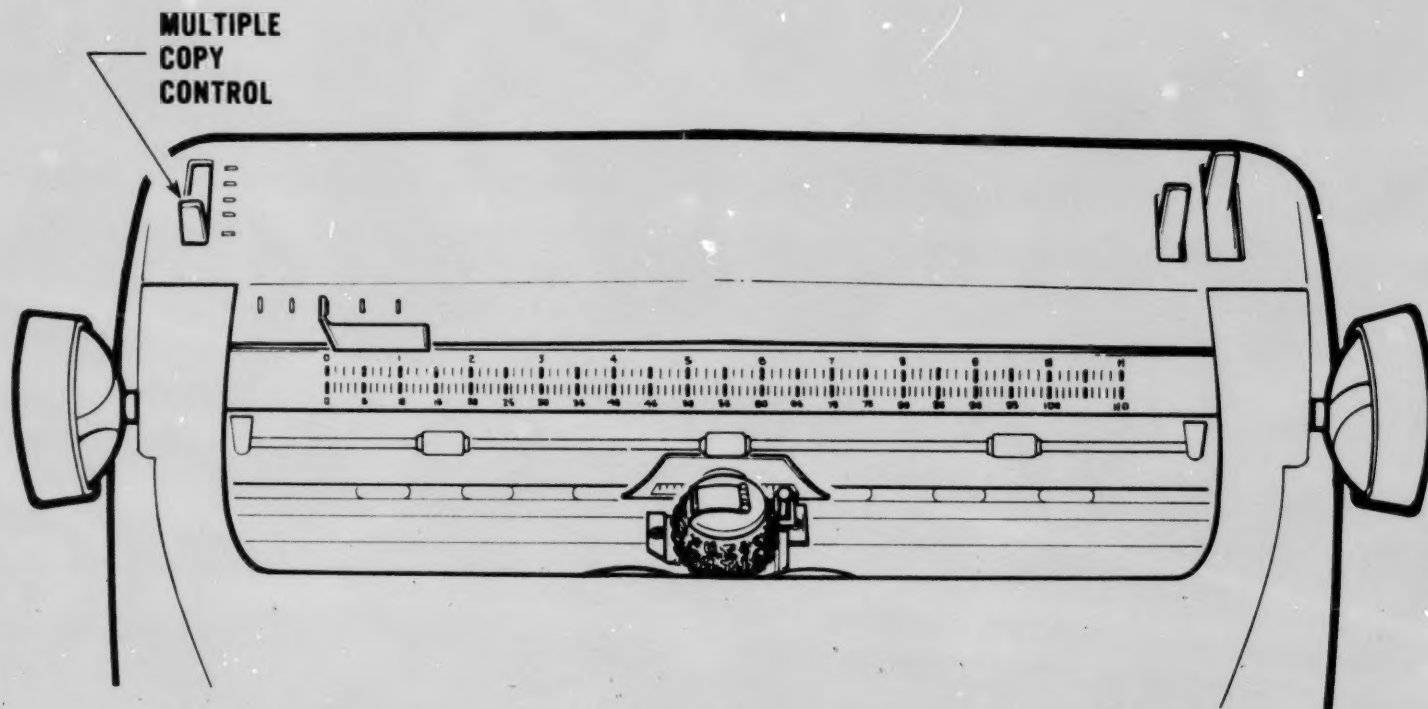
- | | |
|-------------------------|----------------------------|
| 1 On and Off key | 7 Margin Release key |
| 2 Index key | 8 Set and Clear key |
| 3 Backspace key | 9 Shift keys |
| 4 Return key | 10 Multiple Character keys |
| 5 Space bar | 11 Correcting key |
| 6 Hyphen/Underscore key | 12 Express Backspace key |

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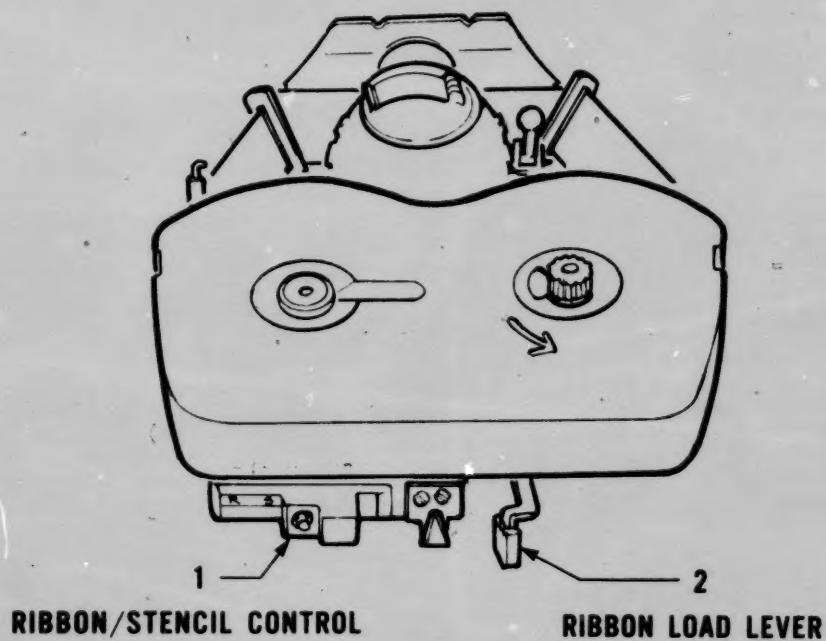
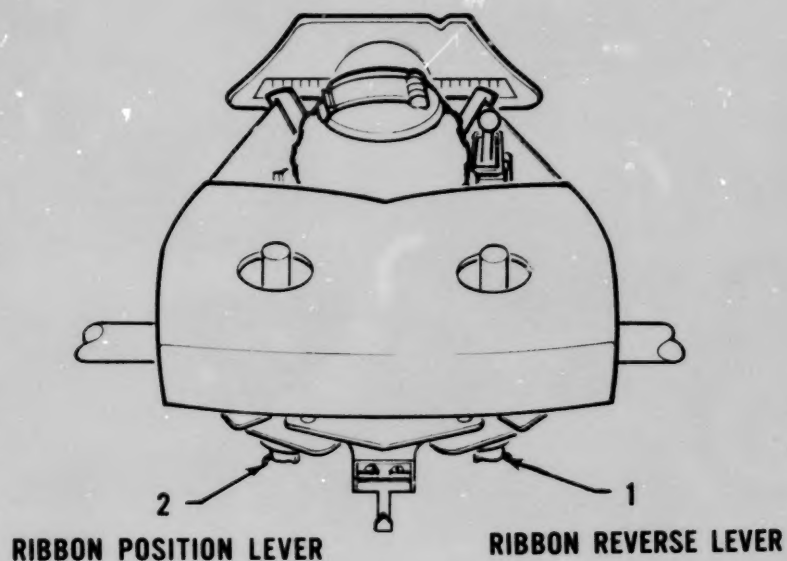
PLATEN COMPONENTS



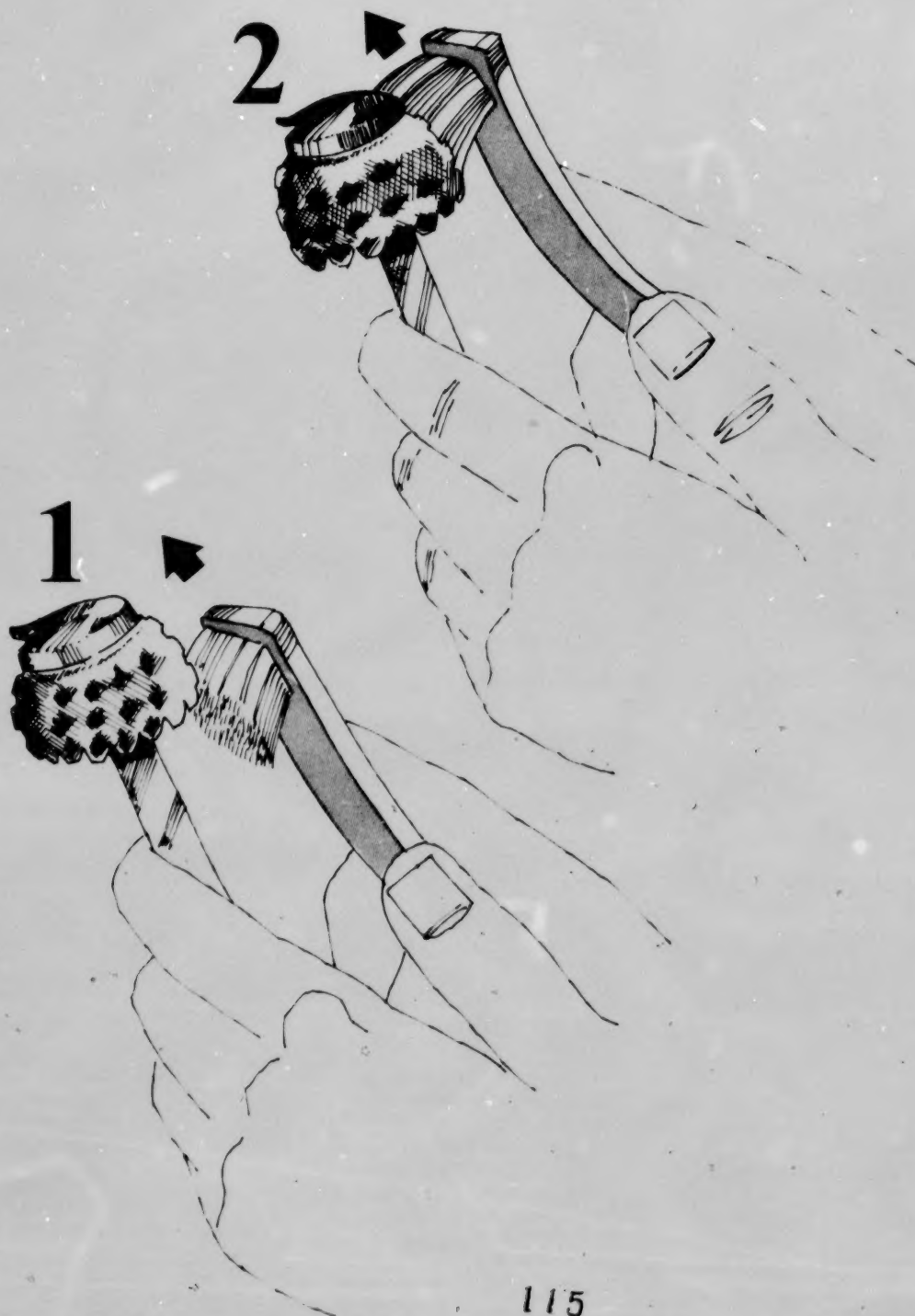
MULTIPLE COPY CONTROL



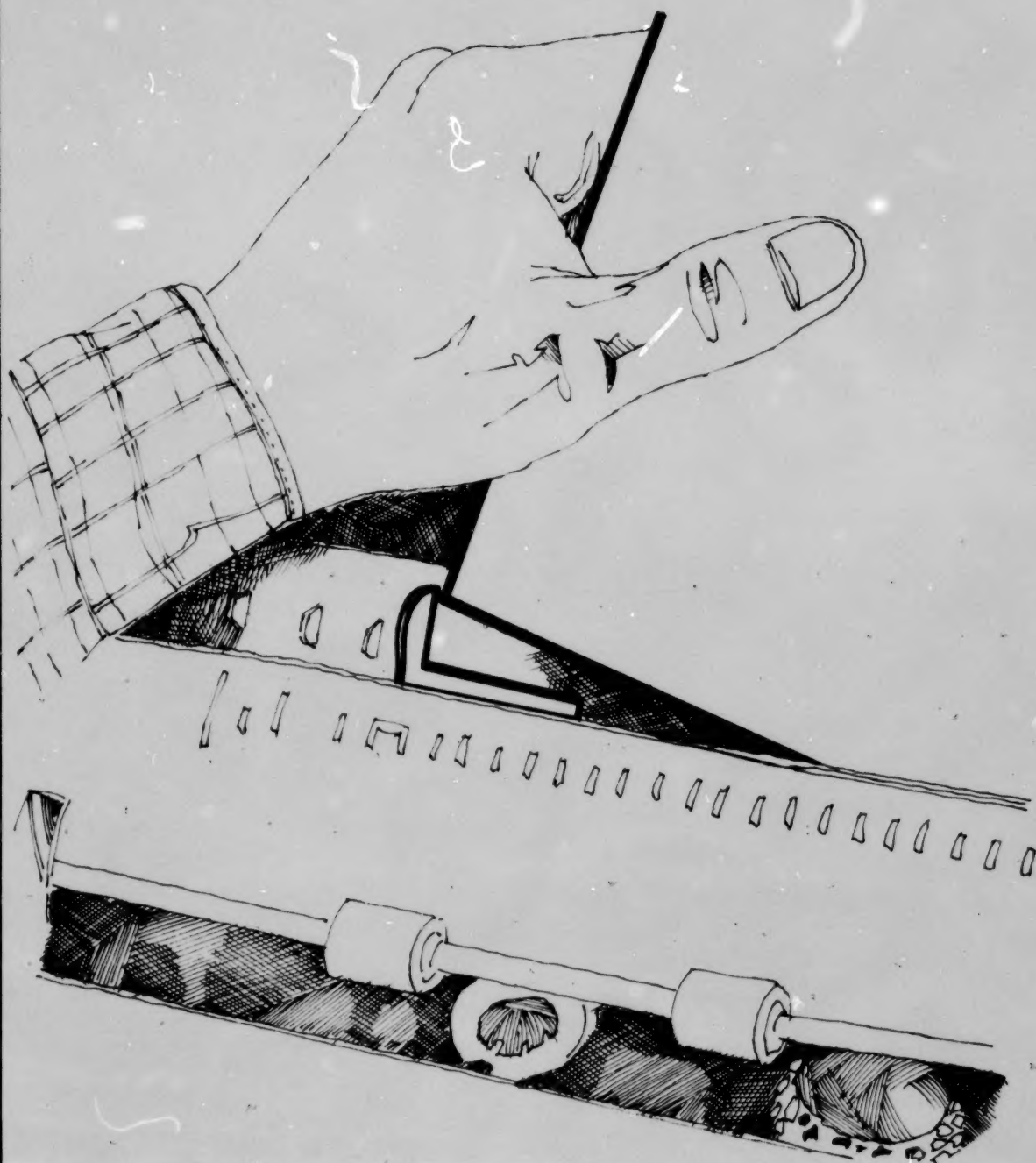
RIBBON COMPONENTS



CLEANING THE TYPING ELEMENT



PAPER INSERTION



UNIT IV

IMMOVABLE CARRIAGE TYPEWRITER

ASSIGNMENT SHEET #1--LOCATING POINTS ON THE SCALE

Directions: Locate the following points on your scale, remembering that the space bar has both repeat and single action.

1. Hit the return key and space to the center of your paper
2. Hit the return key and space over to 30
3. Now back space to 15
4. Hit the return key and space over to 60
5. Now return to the center of your paper

UNIT IV

IMMOVABLE CARRIAGE TYPEWRITER

ASSIGNMENT SHEET #2--ARTYPING EXERCISES

Directions: The directions for the 3 artyping exercises attached are given by symbols such as 3sp, 8X, 5%, etc.

Example: 3sp means strike Space Bar 3 times; 8X means strike X 8 times; 5% means strike % 5 times, etc.

TYPEWRITER MYSTERY #1

Vertical placement: down 14 spaces

Horizontal placement: 40-space line

Line

1 - 10sp 1% 19sp 1%	19 - 16sp 1% 1sp 5%
2 - 9sp 2% 19sp 1%	20 - 15sp 3% 1sp 4%
3 - 9sp 3% 17sp 2%	21 - 14sp 5% 1sp 4%
4 - 9sp 4% 15sp 2%	22 - 14sp 6% 1sp 4%
5 - 10sp 4% 13sp 3%	23 - 13sp 4% 6sp 5%
6 - 10sp 4% 12sp 3%	24 - 12sp 3% 9sp 7%
7 - 11sp 4% 10sp 4%	25 - 6sp 2% 3sp 3% 10sp 3% 4sp 2%
8 - 11sp 4% 9sp 4%	26 - 4sp 9% 12sp 2% 6sp 1%
9 - 12sp 4% 7sp 4%	27 - 2sp 2% 5sp 4% 12sp 2% 7sp 1%
10 - 12sp 5% 6sp 4%	28 - 1sp 2% 6sp 4% 13sp 2% 7sp 1%
11 - 13sp 4% 5sp 4%	29 - 2% 7sp 3% 14sp 2% 7sp 1%
12 - 14sp 4% 3sp 5%	30 - 2% 7sp 3% 14sp 2% 7sp 1%
13 - 14sp 5% 1sp 5%	31 - 2% 6sp 3% 16sp 2% 7sp 1%
14 - 15sp 5% 1sp 4%	32 - 3% 4sp 3% 17sp 2% 7sp 1%
15 - 15sp 6% 1sp 2%	33 - 2sp 7% 18sp 2% 7sp 1%
16 - 16sp 6% 1sp 1%	34 - 4sp 3% 21sp 2% 5sp 1%
17 - 17sp 5%	35 - 29sp 6%
18 - 17sp 2% 1sp 2%	36 - 30sp 4%

TYPEWRITER MYSTERY #2

Go down 8 spaces from the top

Use a 74-space line

Line

1 - 34sp 6X	26 - 16sp 42X
2 - 32sp 10X	27 - 14sp 46X
3 - 32sp 10X	28 - 14sp 46X
4 - 34sp 6X	29 - 14sp 46X
5 - 28sp 18X	30 - 12sp 50X
6 - 26sp 22X	31 - 12sp 50X
7 - 22sp 30X	32 - 12sp 50X
8 - 20sp 34X	33 - 10sp 54X
9 - 20sp 34X	34 - 10sp 54X
10 - 20sp 34X	35 - 8sp 58X
11 - 20sp 34X	36 - 8sp 58X
12 - 20sp 34X	37 - 6sp 20X 8: 6X 8: 20X
13 - 20sp 34X	38 - 6sp 12X 16: 6X 16: 12X
14 - 20sp 34X	39 - 4sp 8X 22: 6X 22: 5X
15 - 20sp 34X	40 - 4sp 4X 25: 8X 25: 4X
16 - 20sp 34X	41 - 2sp 4X 26: 10X 26: 4X
17 - 18sp 38X	42 - 2X 30: 10X 30: 2X
18 - 18sp 38X	43 - 2sp 2X 28: 10X 28: 2X
19 - 18sp 38X	44 - 4sp 2X 27: 8X 27: 2X
20 - 18sp 38X	45 - 6sp 4X 24: 6X 24: 4X
21 - 18sp 38X	46 - 10sp 6X 42: 6X
22 - 18sp 38X	47 - 16sp 8X 26: 3X
23 - 18sp 38X	48 - 24sp 8X 10: 8X
24 - 16sp 42X	49 - 32sp 10X
25 - 16sp 42X	

TYPEWRITER MYSTERY #3

Vertical placement: down 17 spaces

Horizontal placement: 65-space line

Line

1 - 31sp 8%
 2 - 29sp 3%
 3 - 28sp 1% 14sp 2%
 4 - 20sp 4% 2sp 2% 17sp 1%
 5 - 18sp 2% 4sp 2% 19sp 1% 1sp 4%
 6 - 17sp 1% 6sp 1% 21sp 1% 4sp 1%
 7 - 16sp 1% 6sp 1% 22sp 1% 5sp 1%
 8 - 15sp 1% 4sp 3% 22sp 1% 7sp 2%
 9 - 15sp 1% 4sp 3% 20sp 2% 10sp
 10 - 15sp 1% 4sp 3% 18sp 3% 12sp 1%
 11 - 8sp 15% 16sp 3% 14sp 1%
 12 - 7sp 17% 33sp 1%
 13 - 6sp 12% 2sp 3% 1sp 1% 32sp 1%
 14 - 5sp 12% 3sp 3% 2sp 1% 32sp
 15 - 4sp 12% 4sp 3% 3sp 1% 31sp
 16 - 3sp 1% 11sp 1% 4sp 9% 30sp 1%
 17 - 3sp 1% 1sp 2% 1sp 2% 1sp 2% 2sp 1% 3sp 9% 1sp 1% 29sp
 1%
 18 - 3sp 1% 1sp 2% 1sp 2% 1sp 2% 2sp 1% 2sp 9% 3sp 1% 25sp
 1% 2sp 1%
 19 - 3sp 1% 4sp 2% 5sp 11% 5sp 1% 20sp 1% 3sp 1% 3sp 1%
 20 - 3sp 1% 1sp 13% 2sp 2% 3sp 1% 6sp 1% 18sp 2% 2sp 3%
 21 - 7% 9sp 7% 2sp 1% 2sp 2% 2sp 1% 16sp 5% 1sp 4%
 22 - 22sp 4% 2sp 5% 17sp 9%
 23 - 26sp 2% 2sp 12% 6sp 12%
 24 - 36sp 5% 7sp 12%
 25 - 41sp 3% 3sp 8% 1sp 1%
 26 - 44sp 2% 5sp 1% 3sp 5%
 27 - 46sp 10%
 28 - 40sp 5%
 29 - 36sp 4%
 30 - 11sp 6% 11sp 8%
 31 - 17sp 11%

UNIT IV

IMMOVABLE CARRIAGE TYPEWRITER

ASSIGNMENT SHEET #3--CLEANING THE TYPING ELEMENT

Directions: Answer the following statements by writing TRUE or FALSE in the blanks at the left.

- ___ 1. Turn the motor OFF before cleaning the typing element
- ___ 2. The shift lock should be engaged before removing the element
- ___ 3. The recommended way to clean the type is to brush up and away from you
- ___ 4. The element can be clipped to the end of a dual-purpose brush for cleaning
- ___ 5. The spring levers must be held together while removing the element
- ___ 6. The element will be easier to remove if the carrier is positioned in the center of your typewriter
- ___ 7. The element can be removed easily with the typewriter cover closed

UNIT IV
IMMOVABLE CARRIAGE TYPEWRITER

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

Evaluated to the satisfaction of the instructor

Assignment Sheet #2

Evaluated to the satisfaction of the instructor

Assignment Sheet #3

T 1.

F 2.

T 3.

T 4.

T 5.

T 6.

F 7.

UNIT IV

IMMOVABLE CARRIAGE TYPEWRITER

JOB SHEET #1--CENTERING

- I. Tools and equipment required:
 - A. A sheet of 8½" x 11" bond paper
 - B. Typing eraser
 - C. Immovable carriage typewriter
- II. Procedures:
 - A. Be sure your paper edge guide is on the third raised line on the upper left-hand side of your typewriter
 - B. Notice where the right edge of the paper rests and divide this number by 2 (This point will be your center point.)
 - C. Place a tab at the center
 - D. Shift lock and backspace once for every two spaces in the heading you are going to center
 - E. Your title, The State of Texas, contains 18 spaces (Note: Always include the spaces between words as well as the characters in the words.)
 - F. Backspace 9 spaces and then begin typing the title, The State of Texas (Note: If an error is made, erase neatly and properly.)

UNIT IV

IMMOVABLE CARRIAGE TYPEWRITER

JOB SHEET #2--DEVELOPING TYPING PROFICIENCY

(For students who have completed Typing I, or have skill to complete.)

I. Tools and equipment required:

- A. One sheet of 8½" x 11" bond paper
- B. Three sheets of 8½" x 11" onion skin paper
- C. Three sheets of carbon paper
- D. Pencil Eraser
- E. Immovable carriage typewriter

II. Procedures:

- A. Type the following paragraphs with three carbon copies
- B. Erase errors neatly and properly
- C. Center the heading and set tab stops at 20 and 40
- D. Set 1-inch margins
- E. Set tabs for paragraph indentions
- F. Also, double space the paragraphs

THE PRIMARY GOAL

The development of proper typing techniques is the first and most important goal in typewriting. The first thing students must do is learn how quickly they can strike a key and release it and then move on to the next key. Once the students can do this, they will be on their way to achieving good typing techniques.

In addition to learning to strike the keys properly, the student must learn how to do the following things well to become a fast typist. They are:

TAB

RETURN

Practice well and you're bound to succeed!

UNIT IV
IMMOVABLE CARRIAGE TYPEWRITER

JOB SHEET #3--USING THE VARIABLE LINE SPACER

I. Tools and equipment required:

- A. One sheet of $8\frac{1}{2}$ " x 11" bond paper
- B. Typing eraser
- C. Immovable carriage typewriter

II. Procedures:

By pressing in the left platen knob, you can vary the line spacing. This function will allow you to:

- A. Type above or below the current line you are using

- B. Have a double underscore

- C. Type superscripts like (6^2); and subscripts like (H_2O)

(Note: To return to the original line of type, use the variable line spacer.)

- D. Type the following sentences:

1. The term 6^2 indicates that to find the answer, 6 must be multiplied by itself
2. Water is referred to as H_2O
3. If H_2O is dropped into acid, an explosion can occur
4. The title, The State of Texas, is a very appropriate title for a book of this nature
5. If 2^2 and 6^2 were added, the total would be 40

UNIT IV

IMMOVABLE CARRIAGE TYPEWRITER

JOB SHEET #4--USING THE IMMOVABLE CARRIAGE
TYPEWRITER SPECIAL KEYS

I. Tools and equipment required:

- A. Two sheets of 8½" x 11" bond paper
- B. One typing eraser
- C. Immovable carriage typewriter

II. Procedures

Perform

(Note: Repeat action and typamatic action are the same.)

A. Back Space Key (Note: The back space key has single and repeat action.)

- 1. Tap the return key and space to 50 and now backspace to 30 (Use the typamatic action.)
- 2. Tap the return key and space to 30 and now backspace to 15 (Use the single action.)

B. Underscore Key (Note: The underscore key also has single and repeat action.)

- 1. Lock the shift key and use the typamatic action to reach 25 from a margin of 10
- 2. Using the single action of the underscore key, type a line from 25 to 40

C. Return Key

- 1. Locate the return key and the position indicator--the red arrow on the margin scale. (TMs #4 and #5)
- 2. Practice reaching the return key, using the right little finger, and striking the lower left-hand corner of the return key. Now practice moving your little finger to the

return key as quickly and smoothly as you can while the typewriter is in the OFF position

3. Now place a piece of 8½" x 11" bond paper into the machine. Type the following words and after each word, hit the return key. Notice that the position indicator returns to the left margin. (TM #5)

- a. Reposition
- b. Margin
- c. Underscore
- d. Replenish
- e. Typewriter

D. Resetting the Margin

(Note: Use the same procedure for the left and right margins.)

1. To reset the margins, push the margin stop in toward the typewriter
2. Move the margin stop along the scale by using the space bar and align the mark on the margin stop with the position indicator. Now set your margins at the following settings:

Left Margin	Right Margin
a. 10	80
b. 15	90
c. 5	100
d. 30	110
e. 40	85
f. 20	95

E. Perform the following procedures

1. Set five tab stops: 20, 30, 40, 50, and 60. (Make certain before setting these stops that any existing tab stops have been cleared by spacing to the extreme right on the margin scale. Then, while holding down the CLEAR

button, tap the return key.)

2. Now, type the following columns at the tab stops you have just set:

a. she she she she she

b. the the the the the

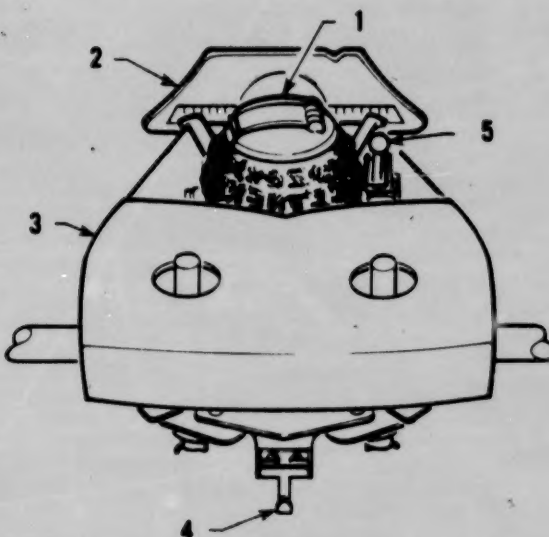
c. and and and and and

d. he he he he he

UNIT II
IMMOVABLE CARRIAGE TYPEWRITER

UNIT TEST

1. Identify parts of the immovable carriage typewriter by completing the following:
 - a. Label the parts of the carriage by placing the name of the part next to the correct number



(1)

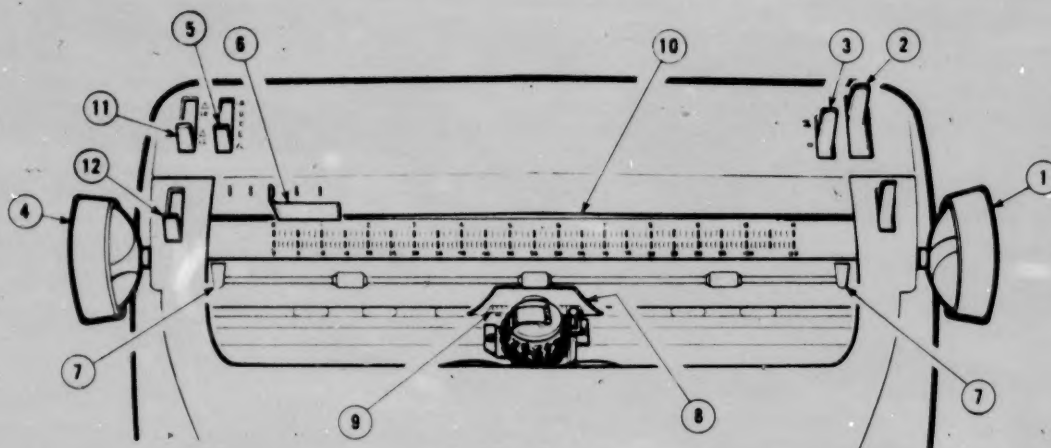
(4)

(2)

(5)

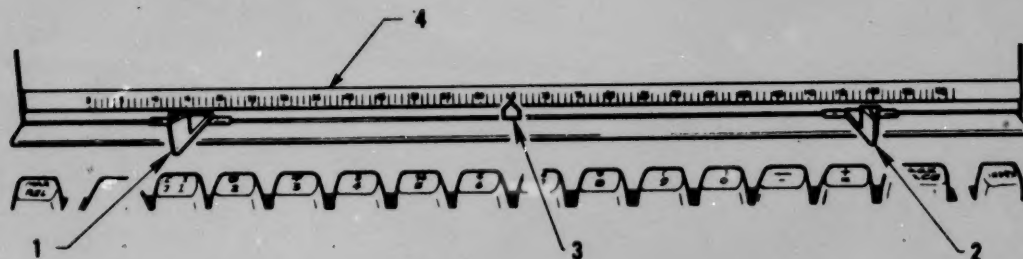
(3)

- b. Label the top components of the immovable carriage typewriter by placing the name of the part next to the correct number



- | | |
|-----|------|
| (1) | (7) |
| (2) | (8) |
| (3) | (9) |
| (4) | (10) |
| (5) | (11) |
| (6) | (12) |

- c. Label the scale parts of the typewriter below and place the name of the part next to the matching number



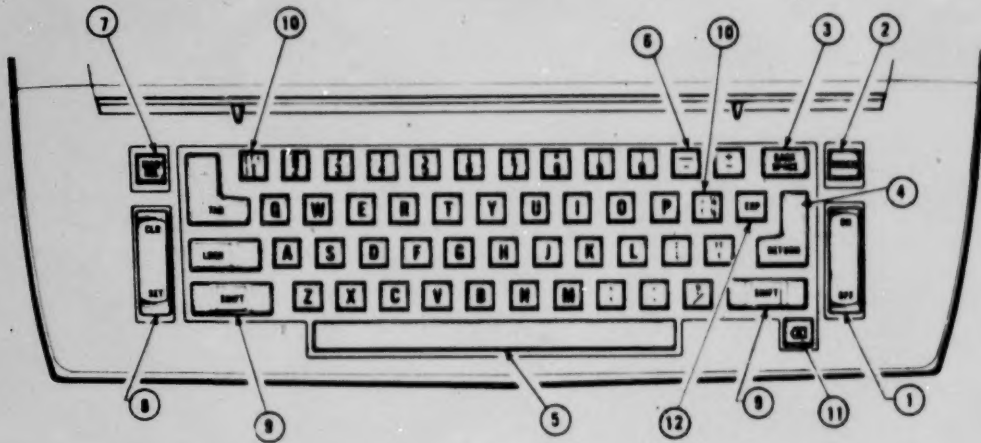
(1)

(3)

(2)

(4)

- d. Identify parts of the keyboard by putting the name of the part next to the correct number



(1)

(7)

(2)

(8)

(3)

(9)

(4)

(10)

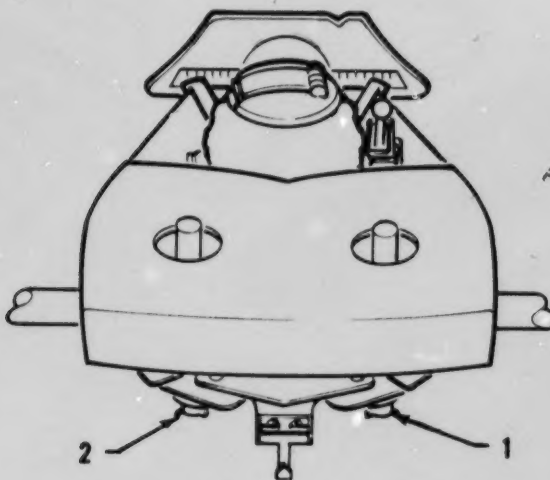
(5)

(11)

(6)

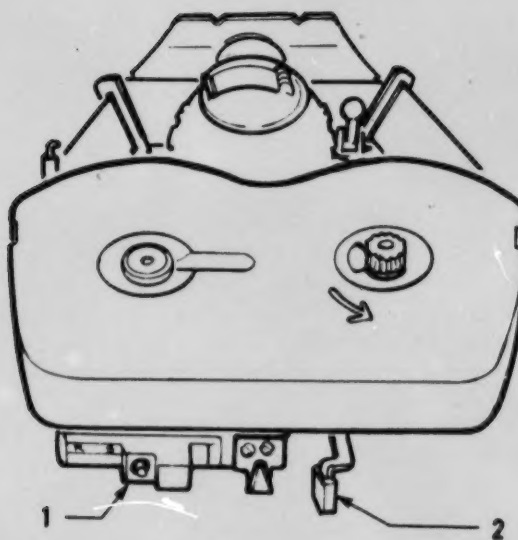
(12)

- e. Identify each set of ribbon components by placing the name of the part next to the correct number



(1)

(2)



(1)

(2)

2. Tell one way to put paper in the typewriter
3. Explain one of the two methods of cleaning the type
4. Fill in the blanks with the correct word
 - a. The platen is moved back to allow for carbon copies by adjusting the _____ lever
 - b. By moving the platen back, this will (increase, minimize) the embossing on the original
5. Fill in the blanks with the correct word
 - a. To erase errors, erase in a _____, circular motion
 - b. Place an index card or other heavy paper between the sheet on which you made your error and the carbon paper to prevent a _____ on the back of your paper from the carbon
6. Number the steps involved when using the correcting key by placing the numbers 1 through 4 in the space to the left of the correct statement, beginning with 1.
 - _____ a. Type the correct character(s)
 - _____ b. Restrike the last incorrectly typed character which will delete it from the paper
 - _____ c. Press the correcting key to backspace to the last incorrectly typed character
 - _____ d. Using the correcting key backspace to the next incorrect character and restrike it to delete it from the paper
7. Place a "✓" beside those statements that are true about the tab key
 - _____ a. The tab key operates through the left margin like the space bar

- _____ b. If your typewriter has tab settings, clear them by tabulating to each stop, and depressing the CLR (clear) end of the tab control
 - _____ c. A tab stop cannot be set at all points on the margin scale
 - _____ d. To set a tab stop on the margin scale, push down on the "Set" end of the tab control
- 8. Find points on the scale
 - 9. Do artyping exercises
 - 10. Tell how to clean a typing element
 - 11. Show you can:
 - a. Center type on a page
 - b. Improve your typing
 - c. Use the variable line spacer
 - d. Use special keys on the immovable carriage typewriter

(Note: If activities #8-#11 have not been completed before the test, ask the instructor when they should be done.)

UNIT IV

IMMOVABLE CARRIAGE TYPEWRITER

ANSWERS TO UNIT TEST

1. a. (1) Typing element
(2) Clear view cardholder
(3) Ribbon cartridge
(4) Position indicator
(5) Impression selector
- b. (1) Right platen knob (7) Paper bail lever
(2) Paper release lever (8) Clear view cardholder
(3) Line spacing lever
(4) Left platen knob (9) Line scale
(5) Multiple copy control (10) Copy guide
(6) Paper edge guide (11) Dual-Pitch lever
(12) Half Backspace lever
- c. (1) Left margin stop
(2) Right margin stop
(3) Typing position indicator
(4) Visible margin scale
- d. (1) On and off key (7) Margin release key
(2) Index key (8) Set and clear key
(3) Backspace key (9) Shift keys
(4) Return key (10) Multiple character keys
(5) Space bar
(6) Hyphen/Underscore key (11) Correcting key
(12) Express Backspace key
- e. (1) Ribbon reverse lever
(2) Ribbon position lever

(1) Ribbon/Stencil control
(2) Ribbon Load lever
2. a. Method I
 1. Bring the paper bail forward and place the paper edge against the paper guide on the left side.
 2. Set the typewriter for spacing desired
 3. Guide the paper with the left hand and use the right hand to operate the platen knob

4. Roll the paper to where the top edge of the paper is one-half inch above the card holder for a one-inch top margin

b. Method II

1. Position the paper behind the platen after bringing the paper bail forward
2. Guide the paper with the left hand as your right little finger depresses the index key
3. a. Method I--Place the ribbon on stencil position and strike all of the keys until there is no ink present on the paper.

(Note: Before removing the typing element, see that the carrier is centered, the cover is open, the motor is turned off, and the shift lock is disengaged.)

b. Method II

1. Remove the typing element using the directions for your own model typewriter
2. Press the element spring levers together, and clip the element to a dual-purpose brush
3. Clean the element by brushing up and away from you
4. a. copy control
- b. minimize
5. a. gentle
- b. dark smudge
6. 4 a.
- 2 b.
- 1 c.
- 3 d.
7. a.
- ✓ b.

_____ c.

✓ d.

8. - 11. Evaluated to the satisfaction of the instructor

UNIT V

USING THE MANUAL TYPEWRITER

UNIT OBJECTIVE

After completing this unit, the student should be able to identify the parts of a manual typewriter and explain what each part does. The student should also be able to identify typing errors, find errors in typed copy, and make corrections. The student should be able to center material to be typed, both horizontally and vertically. This knowledge will be evidenced through demonstration and by satisfactorily completing a unit test.

SPECIFIC OBJECTIVES

After completing this unit of instruction, the student should be able to:

1. Match terms and identify parts of a manual typewriter
2. Match terms, answer questions, and complete statements concerning the manual typewriter and type a list of words using horizontal and vertical centering
3. Identify typing errors, match terms involving typing terms, and type short paragraphs
4. Demonstrate the ability to:
 - a. Identify parts of the manual typewriter
 - b. Proofread for errors
 - c. Correct typing errors
 - d. Center type horizontally
 - e. Center type vertically.
 - f. Center type vertically and horizontally

UNIT V
USING THE MANUAL TYPEWRITER

SUGGESTED ACTIVITIES

I. Instructor

- A. Provide objective sheet
- B. Discuss objective sheet
- C. Pass out information sheet
- D. Discuss information sheet
- E. Make and show transparencies
- F. Distribute and discuss assignment sheets
- G. Demonstrate procedures outlined in assignment sheets
- H. Give test

II. Student

- A. Read and discuss objective sheet
- B. Read and discuss material contained in information sheet
- C. Complete assignment sheets
- D. Take test

INSTRUCTIONAL MATERIALS

I. Included in this unit:

- A. Objective
- B. Information sheet
- C. Transparency master
V-TM-1--Manual Typewriter
- D. Assignment sheets

1. Assignment Sheet #1--Identifying Parts of the Manual Typewriter
 2. Assignment Sheet #2--Proofreading For Errors
 3. Assignment Sheet #3--Correcting Typing Errors
 4. Assignment Sheet #4--Centering Type Horizontally
 5. Assignment Sheet #5--Centering Type Vertically
 6. Assignment Sheet #6--Centering Type Vertically and Horizontally
- E. Answer to assignment sheets
- F. Unit test
- G. Answers to unit test

II. References:

- A. Lessenberry, D. D., Z. James Crawford and Lawrence W. Erickson. Clerical Office Typing, Basic Skills Dallas: South-Western Publishing Company, 1972.
- B. Lessenberry, D. D., Z. James Crawford, Lawrence W. Erickson, Lee R. Beaumont, and Jerry W. Robinson. Century 21 Typewriting. 2nd edition. Dallas: South-Western Publishing Company, 1977.

UNIT V
USING THE MANUAL TYPEWRITER

INFORMATION SHEET

I. Parts of the typewriter

Terms and definitions

1. Carriage--The part of the typewriter that moves from side to side when one types
2. Carriage return--Lever used to return the carriage to the left
3. Cylinder knob--Control that will move paper either up or down in the typewriter
4. Carriage release--Lever that will allow the carriage to move
5. Line space regulator--Feature on the typewriter which allows typing on every line, every other line or every third line
6. Margin set--Feature which will lock margin on both sides of typewriter so that the carriage will move only so far in either direction
7. Paper guide--Guard which aligns the paper as it is placed in the machine
8. Cylinder (Platen)--Part which provides a hard surface against which type bars strike
9. Paper release lever--Device (left and right) which allows paper to be pulled out of typewriter easily
10. Variable line spacer--Changes position of typing line.
11. Shift key-- Keyboard feature that provides a capital letter or upper case when depressed
12. Shift lock--Key which locks shift mechanism so that all letters are typed as capitals or upper case
13. Space bar--Keyboard control which spaces between letters or words

II. Horizontal and vertical centering

A. Terms and definitions

1. Horizontal--The side-to-side space of a sheet of typing paper
2. Vertical--Space from the top to the bottom of a sheet of typing paper
3. Centering--Arranging what is to be typed in center of typing area by counting spaces
4. Pica--Type with 85 available spaces per line
5. Elite--Type with 102 available spaces per line
6. Single space--Line spaces that leave no blank lines between the typed lines
7. Double space--Line spacing with 1 blank line between typed lines
8. Triple space--Line spacing with 2 blank lines between typed lines

B. Horizontal centering by backspace method

1. Move paper guide to left edge so that it is at 0
2. Insert paper and be sure to keep the paper at the left edge of the paper guide
3. Determine whether the type is in Pica or Elite
 - a. If paper right edge is on 85 of paper guide, the typewriter is Pica
 - b. If paper right edge is on 102 of paper guide, the typewriter is Elite
4. Set a tab at the center of typewriter (Be sure all other tabs are cleared)
5. Press the tab key to move the carriage to the center of the page
6. Count the letters and spaces in the word or statement and divide the number by 2. Then backspace to the left that number of times or, from center, backspace once for each 2 letters or spaces in word or statement

EXAMPLE:

NEW HAVEN INN												
1	2	3	4	5	6	7	8	9	10	11	12	13

$$13 \div 2 = 6 \frac{1}{2}$$

Backspace 6 spaces

7. Never backspace for add or leftover letters
 8. Begin typing at the space where backspacing was completed
- C. Vertical centering on a half sheet of paper
1. Find the total lines available for typing on a half sheet of typing paper. Half sheets are 5 1/2 inches long. There are 6 typing lines available for typing per inch.
 2. Count the lines needed to type the job. Subtract that number from available lines on the half sheet. Divide the remaining number by 2. The remaining quotient will be the number of lines at the top and bottom of the half sheet.
 3. Add 1 line to the answer so that there will not be type on the last line of the top margin.
- D. Vertical centering on a full sheet of paper
1. Find total lines available for typing on a full sheet of typing paper. Full sheets are 11 inches long and there are 6 lines per inch.

Example: $11 \times 6 = 66$, lines available for typing
 2. Count the lines needed to type the job. Subtract that number from the available lines on the full sheet. Divide the remaining number by 2. The remaining quotient will be the number of lines at the top and bottom of the full sheet.
 3. Add a line to the answer so that there will not be typing on the last line of the top margin

III. Proofreading and correcting errors

A. Terms and definitions

1. Error--mistake
2. Proofreading--reading typed material to find errors
3. Correct--to change or make right

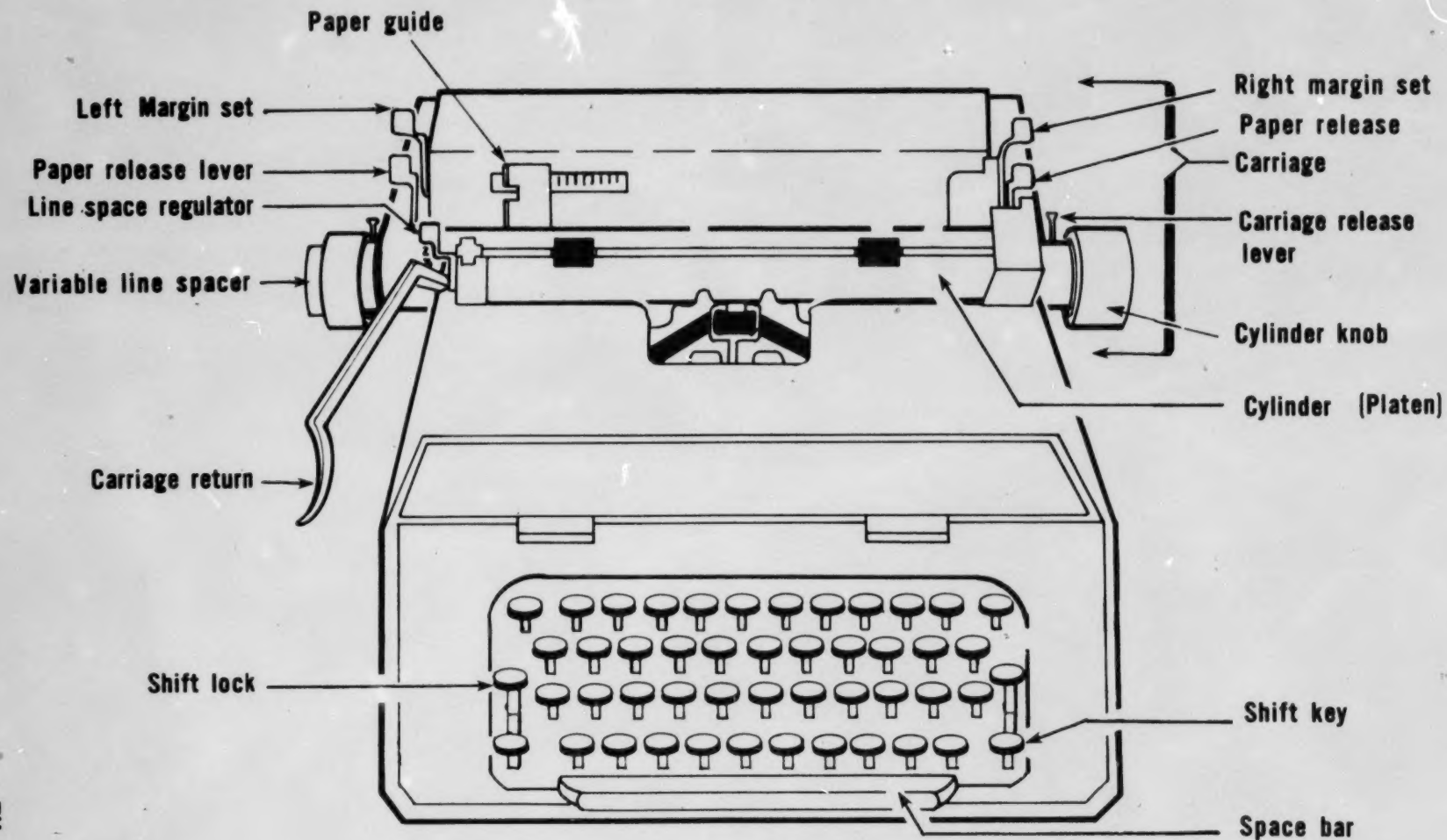
B. Kinds of typing errors

1. An omitted capital letter (.anuary)
2. Failure to space between words (andthe)
3. Strokes that do not show (h liday)
4. Wrong letters (Saterdag)
5. Strike-overs (Monday)
6. An omitted or an added word (it not, it is is not)
7. A missed or wrong punctuation mark (The boy types very fast?)

C. Correcting errors

1. Move the carriage as far as it will go on either the right or the left side
2. If the error is near the top, roll the paper up 2 or 3 lines to make the correction. If the error is near the bottom of the sheet, roll the paper back 2 or 3 spaces.
3. Holding the paper firmly against the cylinder, erase the error carefully or apply correcting fluid. If the eraser is used, brush away the eraser particles when finished.
4. Roll the paper to its original position and type the correction.

MANUAL TYPEWRITER

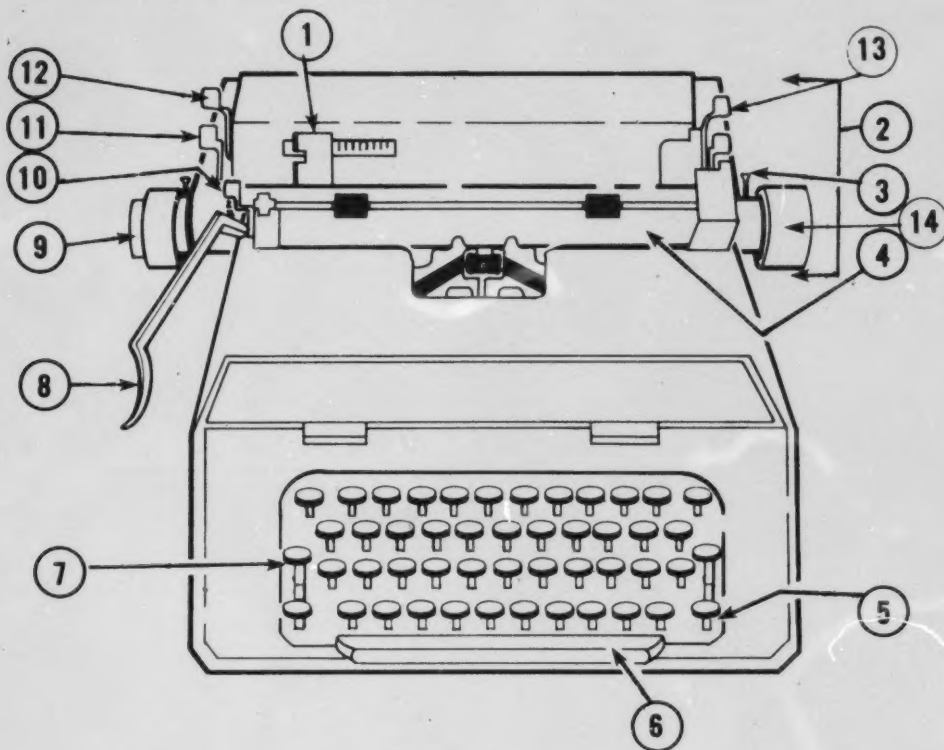


UNIT V

USING THE MANUAL TYPEWRITER

ASSIGNMENT SHEET #1--IDENTIFYING
PARTS OF THE MANUAL TYPEWRITER

Directions: Identify the parts of the manual typewriter below by placing the correct part name by each number, using the information sheet.



- | | |
|----------|-----------|
| 1. _____ | 8. _____ |
| 2. _____ | 9. _____ |
| 3. _____ | 10. _____ |
| 4. _____ | 11. _____ |
| 5. _____ | 12. _____ |
| 6. _____ | 13. _____ |
| 7. _____ | 14. _____ |

UNIT V

USING THE MANUAL TYPEWRITER

ASSIGNMENT SHEET #2--PROOFREADING FOR ERRORS

Directions: Read the following paragraph and circle all the errors:

Summer is abut to begin. Before you you leave school, you should check to see that you have paid all your libray fines. If you haven't turned in in all your books be sure to see the secretary. After all fines havee been paid, you my leave. The secretery can also take care of any problem concerning lost book. So to all of you that have all of your library problems taken care of for this year, have a pleasant summer.

UNIT V

USING THE MANUAL TYPEWRITER

ASSIGNMENT SHEET #3--CORRECTING TYPING ERRORS

Directions: Type the following paragraph as it is written. Then correct the errors, which are underlined, by using a typewriter eraser. (Note: Be usre and brush the typing eraser particles away.)

Typewriters difer greatly in in the number of strokes they will permit to be typed betwen the point where the warning bel rinsg and whree the carriage locks. Soon you will be dividing words at line endings; but thsi lesson will help yuo to learn to complete the word you are typing when the warning bell rings? A wrod of one to four letters can be added at at the end of the line if if the bell rings on the last letter of a a word.

UNIT V
USING THE MANUAL TYPEWRITER

ASSIGNMENT SHEET #4--CENTERING TYPE HORIZONTALLY

Directions: Type the following job on a half-sheet of paper. Center each line horizontally. Use the backspace-from-center method. Begin typing on line 12. Triple space after the title and double space the rest of the list. Capitalize all letters in title.

Useful Typewriter Parts
aligning scale
variable line spacer
cylinder scale
cylinder knob
paper guide
paper release

Directions: Type the job below and center each line horizontally on a half-sheet of paper. Begin on line 7. Triple space after the title and double space the rest of the list. Capitalize all letters in title.

Dance to the Soul Searchers
Friday, June 30, 19__
8:30 p.m.--12:30 a.m.
Community Auditorium
90th and Broadway
Admission \$2.00
Sponsored by
Parks and Recreation Division
City of New York

UNIT V

USING THE MANUAL TYPEWRITER

ASSIGNMENT SHEET #5--CENTERING TYPE VERTICALLY

Directions: Type the title and 2 paragraphs below. Center them vertically on a full sheet of paper. Double space between paragraphs, single space between lines and triple space after the title. Do not indent the paragraph and use a 60 space line. Capitalize the title.

Care of your Typewriter
The kind of work you prepare on your typewriter will depend a great extent on how you take care of it.

Be sure that you always wipe the dust and eraser particles from all parts of your typewriter after each use.

UNIT V
USING THE MANUAL TYPEWRITER

ASSIGNMENT SHEET #6--CENTERING TYPE
VERTICALLY AND HORIZONTALLY

Directions: Type the following announcement, center it vertically and horizontally on a full sheet of paper. Triple space after the title and double space between each line. Capitalize all letters in the heading.

Grand Opening
Mayas
Blouses
Shirts
Sports clothes
Fine jewelry
Open Monday thru Saturday
9:00 a.m. to 6:00 p.m.
600 Main Street
Austin, Texas
454-7800

UNIT V
USING THE MANUAL TYPEWRITER

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

- | | |
|---------------------------|--------------------------|
| 1. Paper guide | 8. Carriage return |
| 2. Carriage | 9. Variable line spacer |
| 3. Carriage release lever | 10. Line space regulator |
| 4. Cylinder | 11. Paper release |
| 5. Shift key | 12. Left margin set |
| 6. Space bar | 13. Right margin set |
| 7. Shift lock | 14. Cylinder knob |

Assignment Sheet #2

Summer is about to begin. Before you leave school, you should check to see that you have paid all your library fines. If you haven't turned in all your books, be sure to see the secretary. After all fines have been paid, you may leave. The secretary can also take care of any problems concerning lost books, so to all of you that have all of your library problems taken care of for this year, have a pleasant summer.

Assignment Sheet #3

Typewriters differ greatly in the number of strokes they will permit to be typed between the point where the warning bell rings and where the carriage locks. Soon you will be dividing words at line endings; but this lesson will help you to learn to use the margin release. You will also learn to complete the word you are typing when the warning bell rings. A word of one to four letters can be added at the end of the line if the bell rings on the last letter of a word.

Assignment Sheet #4

USEFUL TYPEWRITER PARTS

aligning scale

variable line spacer

cylinder scale

cylinder knob

paper guide

paper release

DANCE TO THE SOUL SEARCHERS

Friday, June 30, 19__

8:30 p.m.--12:30 a.m.

Community Auditorium

90th and Broadway

Admission \$2.00

Sponsored by

Parks and Recreation Division

City of New York

Assignment Sheet #5

CARE OF YOUR TYPEWRITER

The kind of work you prepare on your typewriter will depend a great extent on how you take care of it.

Be sure that you always wipe the dust and erasure crumbe from all parts of your typewriter after each use.

Assignment Sheet #6

GRAND OPENING
MAYAS

Blouses

Shirts

Sports Clothes

Fine Jewelry

Open Monday thru Saturday

9:00 a.m. to 6:00 p.m.

600 Main Street

Austin, Texas

454-7800

UNIT V
USING THE MANUAL TYPEWRITER

UNIT TEST

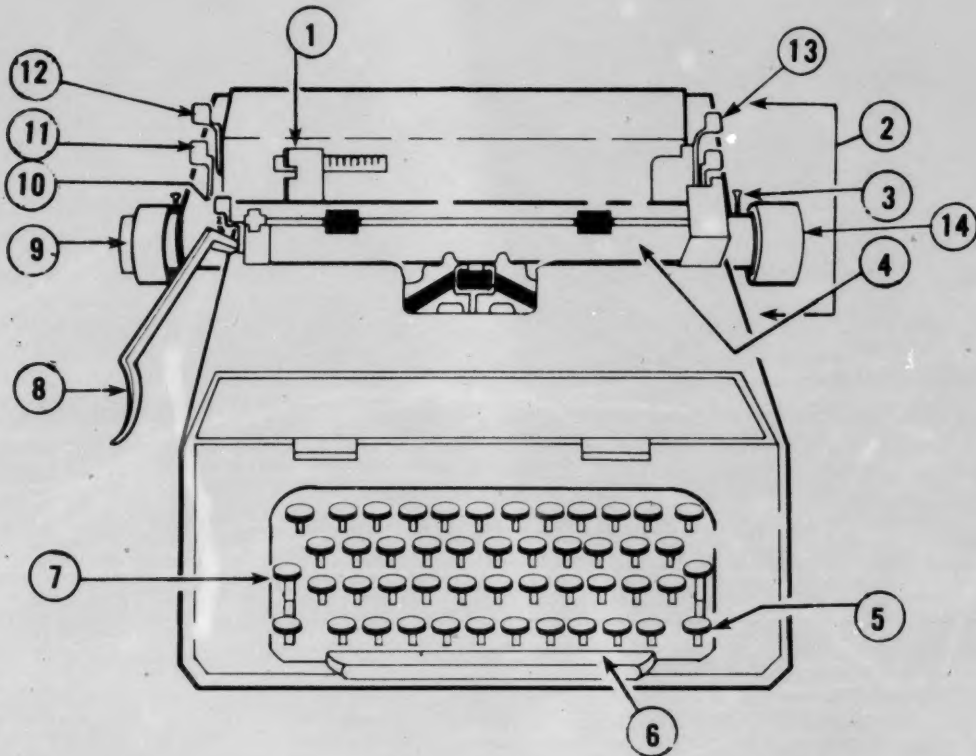
1. a. Match the terms on the left to the correct definition.

- | | |
|--------------------------------------|--|
| _____ 1. Carriage re-
lease lever | a. Key which locks shift
mechanism so that all
letters are typed as
capitals |
| _____ 2. Carriage | b. Part of the typewriter
that moves from side to
side when one types |
| _____ 3. Shift key | c. Keyboard control which
spaces between letters
or words |
| _____ 4. Carriage
return | d. Feature which locks
margin in typewriter so
that the carriage will
only move so far in
either direction |
| _____ 5. Margin set | e. Lever used to return the
carriage to the left |
| _____ 6. Paper re-
lease lever | f. Keyboard feature that
provides a capital
letter when depressed |
| _____ 7. Cylinder
knob | g. Device which allows
paper to be pulled out
of typewriter easily |
| _____ 8. Paper guide | h. Control that will move
paper either up or down
in the typewriter |
| _____ 9. Line space
regulator | i. Part which provides a
hard surface against
which type bars strike |
| _____ 10. Cylinder | j. Feature on the typewrit-
er which allows typing
on every line, every
other line or every third
line |
| _____ 11. Space bar | |
| _____ 12. Shift lock | |

k. Guard which aligns the paper as it is placed in the machine

l. Lever that will allow the carriage to move

1. b. Label the parts of the typewriter below in the spaces provided, matching the typewriter part number with the space number.



1. _____	8. _____
2. _____	9. _____
3. _____	10. _____
4. _____	11. _____
5. _____	12. _____
6. _____	13. _____
7. _____	14. _____

2. a. Match terms on the left with their correct definition by placing the number in the space provided.

- | | |
|---------------------|--|
| ___ 1. Horizontal | a. Line spacing with <u>2</u> blank lines between typed lines |
| ___ 2. Vertical | b. The side-to-side space of a sheet of typing paper |
| ___ 3. Single space | c. Space from the top to the bottom of a sheet of typing paper |
| ___ 4. Pica | d. Line spacing with <u>1</u> blank line between typed lines |
| ___ 5. Elite | e. Arranging what is to be typed in center of typing area by counting spaces |
| ___ 6. Double space | f. Line spaces that leave <u>no</u> blank lines between the typed lines |
| ___ 7. Centering | g. Type with 102 available spaces per line |
| ___ 8. Triple space | h. Type with 85 available spaces per line |

2. b. Complete the following questions and statements by providing the correct answers.

1. How many vertical lines measure one inch?
2. How many lines are on a half sheet of paper?
3. What line number is the center of the page when you are typing on a PICA typewriter?
4. How many lines are on a full sheet of paper?
5. What is the center of the page when you are typing on an ELITE typewriter?
6. The method of horizontal centering you learned is called the _____ method.
7. When centering horizontally, you should set a _____ at the center of your typewriter.

2. c. Type the following list, center it horizontally and vertically on a half sheet of paper. Capitalize the title, triple space after title, and double space between lines.

Necessities for Good Grooming
Daily Bath
Use of Deodorant
Clean Clothing
Clean Hair
Clean Shoes

3. a. Identify seven kinds of typing errors.

- | | |
|----|----|
| 1. | 5. |
| 2. | 6. |
| 3. | 7. |
| 4. | |

3. b. Match the terms involving typing language with their proper definitions

- | | |
|---------------------|---|
| ___ 1. Proofreading | a. Mistake |
| ___ 2. Correct | b. Reading over typed material to find mistakes |
| ___ 3. Error | c. To change |

3. c. Type the following paragraphs correcting all errors found.

1. One the the must inportant things an employee needs to knoo is how to get along with others. If you can't get along with your fellow workers you will be unhappy. If you can't get along your boss, you will be be fired.
2. Thank goodness it's Friday. This has really been a long week. The dog ran up the stairs and caused Mother to all, the cat ate the bird and the washer overflowed. Thank goodness it's Friday.

4. Demonstrate the ability to:
 - a. Identify parts of the manual typewriter
 - b. Proofread for errors
 - c. Correct typing errors
 - d. Center horizontally
 - e. Center vertically
 - f. Center vertically and horizontally

(Note: If these activities have not been accomplished prior to the test, ask the instructor when they should be completed.)

UNIT V
USING THE MANUAL TYPEWRITER

ANSWERS TO UNIT TEST

1. a. 1. l 7. h
2. b 8. k
3. f 9. j
4. e 10. i
5. d 11. c
6. g 12. a
- b. 1. Paper guide 7. Shift lock
2. Carriage 8. Carriage return
3. Carriage release lever 9. Cylinder knob
4. Cylinder 10. Line space regulator
5. Shift key 11. Paper release lever
6. Space bar 12. Margin set
13. Paper release
14. Cylinder knob
2. a. 1. b 5. g
2. c 6. d
3. f 7. e
4. h 8. a
- b. 1. 6 lines 5. 51
2. 33 6. backspace
3. 42 7. tab
4. 66

c.

NECESSITIES FOR GOOD GROOMING

Daily Bath

Use of Deodorant

Clean Clothing

Clean Hair

Clean Shoes

3. a. 1. An omitted capital letter
2. Failure to space between words
3. Strokes that do not show
4. Wrong letters
5. Strikeovers
6. An omitted or added word
7. A missed or wrong punctuation mark
- b. 1. b
2. c
3. a
- c. 1. One of the most important things an employee needs to know is how to get along with others. If you can't get along with your fellow workers, you will be unhappy. If you can't get along with your boss, you will be fired.

2. Thank goodness it's Friday. This has really been a long week. The dog ran up the stairs and caused mother to fall. The cat ate the bird, and the washer overflowed. Thank goodness it's Friday.
4. Evaluated to the satisfaction of the instructor.

UNIT VI
WRITTEN COMMUNICATION

UNIT OBJECTIVE

After completing this unit, the student should be able to identify different types of written communication and have an understanding of planning and composing written communication. This knowledge will be evidenced through demonstration and by successfully completing a unit test.

SPECIFIC OBJECTIVES

After completing this unit of instruction, the student should be able to:

1. Identify true statements, match terms, and select correct answers concerning written communications
2. Identify true statements dealing with human relations in written communications
3. List factors concerning eye appeal and identify true statements dealing with the receiver's opinion of the letter
4. Identify true statements about planning and composing written communication
5. Demonstrate the ability to:
 - a. Label the parts of a business letter
 - b. Label the four main sections of a business letter
 - c. Label the three main sections of a memorandum
 - d. Write a personal letter
 - e. Write a "modified-block" business letter

UNIT VI

WRITTEN COMMUNICATION

SUGGESTED ACTIVITIES

- I. Instructor
 - A. Provide objective sheet
 - B. Discuss objective sheet
 - C. Pass out information sheet
 - D. Discuss information sheet
 - E. Make and show transparencies
 - F. Distribute and discuss assignment sheets
 - G. Demonstrate procedures outlined in assignment sheets
 - H. Give test and review any questions missed
- II. Student
 - A. Read and discuss objective sheet
 - B. Read and discuss material contained in information sheet
 - C. Complete assignment sheets
 - D. Take test

INSTRUCTIONAL MATERIALS

- I. Included in this unit:
 - A. Objectives
 - B. Information sheet
 - C. Transparency masters
 - 1. VI-TM-1--Letter of Acknowledgment
 - 2. VI-TM-2--Adjustment Letter
 - 3. VI-TM-3--Appointment Letter

4. VI-TM-4--Collection Letter
 5. VI-TM-5--Credit Letter
 6. VI-TM-6--Directives
 7. VI-TM-7 Follow-up Letter
 8. VI-TM-8--Form Letter
 9. VI-TM-9--Letter of Inquiry
 10. VI-TM-10--Memorandum
 11. VI-TM-11--Personal Letter
 12. VI-TM-12--Public Relations Letter
 13. VI-TM-13--Sales Promotion Letter
 14. VI-TM-14--Letters Purchasing Goods and
Services
 15. VI-TM-15--Letter of Request
 16. VI-TM-16--Report
 17. VI-TM-17--Letter Requesting a Reservation
 18. VI-TM-18--Social Letter
 19. VI-TM-19--Letter of Transmittal
 20. VI-TM-20--Business Letter "Blocked"
Style
 21. VI-TM-21--Memorandum
 22. VI-TM-22--Business Letter "Blocked" Style
 23. VI-TM-23--Business Letter "Modified-Block"
Style
- D. Assignment sheets
1. Assignment Sheet #1--Labeling The Parts of a
Business Letter
 2. Assignment Sheet #2--Labeling The Four Main
Sections of a Business
Letter

3. Assignment Sheet #3--Labeling the Three Main Sections of a Memorandum
4. Assignment Sheet #4--Writing a Personal Letter
5. Assignment Sheet #5--Writing a "Modified-Block" Business Letter

- E. Answer to assignment sheets
- F. Test
- G. Answers to test

II. References: Books

- A. Anderson, Ruth I. and others. Administrative Secretary. 2nd ed. New York: McGraw-Hill Book Company, 1976.
- B. Fruehling, Rosemary T. and Sharon Bouchard. Business Correspondence. 2nd ed. New York: McGraw-Hill Book Company, 1976.
- C. Gavin, Ruth E. and William A. Sabin. Reference Manual for Stenographers and Typists. 4th ed. New York: McGraw-Hill Book Company, 1970.
- D. Gregg, John R. and others. Applied Secretarial Procedures. 6th ed. New York: McGraw-Hill Book Company, 1968.
- E. Hanna, Marshall J. and others. Secretarial Procedures and Administration. 6th ed. Cincinnati: South-Western Publishing Company, 1973.
- F. House, Clifford R. and Apollina M. Koeble. Reference Manual for Office Personnel. 5th ed. Cincinnati: South-Western Publishing Company, 1970.
- G. Lessenberry, D. D. and others. Century 21 Typewriting. Cincinnati: South-Western Publishing Company, 1972.
- H. Meehan, James R. Secretarial Office Procedures. 8th ed. Cincinnati: South-Western Publishing Company, 1972.
- I. Poe, Roy W. and Rosemary T. Fruehling. Business Communications. 4th ed. New York: McGraw-Hill Book Company, 1972.
- J. Reed, Jeanne. Business Writing. New York: McGraw-Hill Book Company, 1970.

UNIT VI
WRITTEN COMMUNICATION

INFORMATION SHEET

I. Types of written communication

A. Acknowledgement letters (TM #1)

1. Say "thank you"
2. Make a positive statement while giving information
3. Answer questions or tell how materials will be sent.
4. Indicate correspondence has been received but action will be delayed.

B. Adjustment letters (TM #1)

1. Response to claims
2. Should be written promptly
3. Show customer you understand the problem
4. Tell what you will do about the problem
5. Are polite

C. Appointment letters (TM #3)

1. When asking for an appointment, be sure to include
 - a. Name of person
 - b. Time
 - c. Date--include day of week
 - d. Place
2. Keep correspondence short and clear

- D. Collection letters (TM #4)
 - 1. Reminders that accounts are past due
 - 2. Assume that customer intends to pay bill
 - 3. Can be form letters
- E. Credit letters (TM #5)
 - 1. Letters written to acknowledge the acceptance of credit application
 - 2. After investigation of applicant's reference, letter written to either accept or refuse credit
 - 3. Letter to new customer describing special privileges, explaining terms of payment, and encouraging use of new charge account
- F. Directives (TM #6)
 - 1. Written instructions from an employer or supervisor to an individual or group
 - 2. Require no exact form or style of writing
- G. Follow-up letters (TM #7)
 - 1. Follow any preceding communication
 - 2. Follow business transaction
 - 3. Follow telephone conversations
- H. Form letters (TM #8)
 - 1. Can handle routine correspondence
 - a. Credit
 - b. Collection
 - c. Inquiries
 - d. Acknowledgement
 - e. Sales

2. Body of letter may be duplicated in advance with date, inside address, salutation, and other information to be added

I. Letters of inquiry (TM #9)

1. Request for information or other needed material
2. Should say clearly what is needed
3. Should be complete and to the point

J. Memorandums (TM #10)

1. Normally include three main parts
 - a. The heading is usually the printed name of the company
 - b. The subject is a statement explaining what the memo is about
 - c. The message should present the main idea first and then follow with details
2. Should be single-spaced, with double-spacing between paragraphs

K. Personal letters (TM #11)

1. Written to a friend or relative
2. Should be informal
3. Require no certain form of writing

L. Public relations letters (TM #12)

1. Express thanks
2. Tell about a special occasion
3. Offer to be of help
4. Offer congratulations
5. Express good will

M. Promotion letters (TM #13)

1. Encourage the customer to buy a product now
2. Get customers interested in buying in the future
3. Keep the customer aware of the company
4. Ask a customer to use a product on trial

N. Letter buying goods or services (TM #14)

1. Is an ordering letter
2. Usually accompanies a purchase order
3. Must be accurate
4. Must be dated

O. Reports (TM #16)

1. Contain

- | | |
|--------------------|--------------------|
| a. Heading | e. A conclusion |
| b. Inside address | f. Recommendations |
| c. An introduction | g. Signature |
| d. The body | |

2. Preparing

- a. Give topic in title
- b. Gather the needed facts
- c. Look at what you have
- d. Decide how to present facts
- e. Write report
- f. Read and make changes, if needed
- g. May be written to cover one thing or an entire project

P. Requests (TM #15)

1. Clear
2. Specific
3. Complete
4. Brief

Q. Making a reservation (TM #17)

Include:

1. Exact time and date of arrival
2. Type of accommodations desired
3. Time and date of departure
4. Asking about any special rates available for convention, group, etc.
5. Request for a written confirmation of the reservation
6. Carbon copy of request to be kept on file

R. Social (TM #18)

1. May be written on personal basis
 - a. "Thank you" letters
 - b. Letters of sympathy
 - c. Letters of congratulation
2. Business matters usually not included

S. Transmittal letters (TM #19)

1. Should accompany:
 - a. A check
 - b. A money order
 - c. An important business paper

2. Should identify:

- a. What is being sent
- b. How many items, papers, etc.
- c. Amount of money enclosed
- d. Purpose for sending
- e. What the person receiving the letter should do

T. Business letters

1. Usually have four parts:

- a. Heading--includes "company letterhead" and "date line"
- b. Opening--includes "inside address" and "greeting"
- c. Body--includes the message of the letter
- d. Closing--includes the complimentary closing, company signature, signature of writer, identification of writer, reference initials, enclosure notation, carbon copy notation

2. Blocked business letter--most commonly used in offices today because is easier and faster to type and therefore saves money in production cost (TM #20)

3. Modified blocked letter--all letter parts begin at the left margin, except the date line and complimentary closing which begin at the center of the paper. Paragraphs may be indented if desired (TM #22)

II. Human relations in business communication

A. Place yourself in reader's position--reader cannot see your face or hear your voice

B. Create a "you" attitude

1. Write from a reader's point-of-view

2. Use the words "you" and "your" rather than "I", "mine", "we", and "ours"

C. Always suggest rather than demand

1. Most people do not respond to a demanding statement
2. Well-stated suggestions will help the reader to want to do what you suggest

D. Avoid making false claims

1. Practice good human relations
2. Do not point out "wrongs" of the reader

E. Clearly explain why you say "no" and suggest something else

1. Give good reasons, not excuses, for saying "no"
2. Suggest what else can be done

F. Keep a positive attitude

1. Most people respond favorably to a tactful, positive approach
2. Use the following words in a letter to emphasize a positive attitude:

advantage	dependable	generous	success
agreeable	deserving	happy	welcome
benefit	exclusive	pleasure	
comfortable	enjoyable	profit	
confident	fortunate	satisfaction	

III. Things which influence the receiver's opinion of the letter

A. Eye appeal

1. The letter which is neat and attractive gives a good impression
2. If everything is correct, the person receiving the letter will know your company takes pride in its work

3. The letter should be placed so it looks attractive on the page
4. Typing should be clear and easy to read
- B. Correct name, title, and address of person receiving letter
- C. Paragraph divisions
 1. Use short paragraphs because these are easier to read
 2. Use paragraphs of six or less lines
- D. Correct spelling and punctuation--spelling and punctuation errors ruin the letter and draw attention from the message
- E. Signature

Type the name and title of person writing the letter beneath the writer's signature because some handwriting is hard to read

IV. Steps in planning and writing written communications

- A. List all details you wish to include
- B. Think of every point you need to include in the communication. Jot down ideas as you think of them. These ideas can be sorted later and put into correct order
- C. Don't repeat an idea. Write the message in a pleasant and friendly manner
- D. Write each point included in the communication in a brief, complete, clear, correct and polite manner
- E. Make the first sentence strong and important
- F. End with an effective closing sentence
- G. Be sure everything in the letter is correct
- H. Make the message as short as possible

LETTER OF ACKNOWLEDGEMENT

June 21, 1976

Mr. Ralph Zee
2635 Hemphill Drive
Azle, Texas 76020

Dear Mr. Zee:

Thank you for your order of June 17 for two (2) size #6 stainless steel hoes. That order is being sent to you today via insured Parcel Post.

If we can be of further service, please let us know.

Sincerely,

R. J. Johnson
Sales Manager

ris

ADJUSTMENT LETTER

October 7, 1978

Mrs. Jean Tibits
1919 Wichita St.
Fort Worth, Texas 76119

Dear Mrs. Tibits:

Enclosed is a copy of the current Gardening Supplies Catalog you requested in your letter of October 3. We regret that the Farming Supplies Catalog was sent by mistake. We hope this has caused you no delay in ordering needed supplies.

Please keep the Farming Supplies Catalog, as you might find some items you could use.

Thank you for your interest in our gardening supplies. If we can be of further service, please let us know.

Sincerely,

Fred Aaron
Purchasing Supplies

ris

Enclosure

APPOINTMENT LETTER

April 2, 1974

Mr. K. C. Rogers, Vice-President
Killman Manufacturing Company
7676 Wedgemont Drive
Dallas, Texas 75469

Dear Mr. Rogers:

If convenient, I would like to meet with you in your office at 2 p.m. Thursday, April 9. Several purchasing procedural changes have been made recently, and I feel you would appreciate having this information.

If there is a conflict at that time, please let me know because any other time would be all right for me.

Sincerely yours,

Kay Bennett
Purchasing Department

ris

COLLECTION LETTER

March 15, 1977

Mrs. Lucy Walters
3938 Rosewood
Haltom City, Texas 76117

Dear Mrs. Walters:

In completing this month's statements, we noticed your account has a past-due balance. Since you have always been prompt in paying your account, we feel that you may have overlooked this particular statement. If you have already mailed your payment, please disregard this notice.

We appreciate your business and hope to continue serving you.

Sincerely yours,

Lois Wedge
Accounting Department

ris

CREDIT LETTER

April 23, 1978

Mrs. Wanda Barker
4619 Wilshire Blvd.
Hurst, Texas 76053

Dear Mrs. Barker:

It is a pleasure to welcome you as an Exxon credit-card holder. Enclosed is a pamphlet stating the special privileges to which you are entitled, as well as our terms of payment.

We hope you enjoy using your Exxon credit card. Thank you for your account.

Sincerely yours,

B. J. Haliburton
Sales Manager

ris

Enclosure

DIRECTIVES

September 8, 1975

To Office Personnel:

Due to the increasing number of company employees, the business office has requested office personnel to turn in time sheets on the 18th day of each month.

FOLLOW-UP-LETTER

June 4, 1977

Mr. R. M. Robere
Plant Manager
Howard Manufacturing Company
1212 Wheeler St.
Handley, Texas 76112

Dear Mr. Robere:

Thank you for your June 3 telephone order for KVT-R180 single-edge Lathe blades.

The shipment will be sent June 7 by truck to Dock 10, Ritner Corporation, Dallas. The price we quoted was \$103.98. The billing invoice will be sent to you by mail.

We appreciate your business. If we can assist you further, please let us know.

Sincerely yours,

Clara Franks
Shipping Department

ris

FORM LETTER

(Date)

Dear

Thank you for your application for the position
of After we have evaluated
your qualifications in regard to our needs, we will
be in touch with you.

If you have further questions about our company,
please call me.

Sincerely,

LETTER OF INQUIRY

March 16, 1978

Dr. Loletta Lott, Professor
English Department
East Texas State University
Commerce, Texas 75428

Dear Dr. Lott:

Please send me a copy of the current ETSU catalog and any other information you feel is necessary. I am graduating from high school this May and would like to enter the ETSU summer school program.

I plan to major in English and am eager to look at the program requirements.

Thank you for your time and assistance.

Sincerely yours,

Frank Huttman
7323 Merrimack
Burleson, Texas 76098

ris

MEMORANDUM

TO: Jane Mann,
Counselor

FROM: Miriam Day,
President

SUBJECT: Council Meeting

DATE: 3-11-78

The Student Council will meet at 3 p.m. Tuesday, March 15, in the Herald Room. Please announce this to classes so that Student Council members and teachers can mark the date on their calendars.

Terrence Holcombe, administrator of the School Board Council, will be the guest speaker, discussing "How To Be an Effective Council."

PERSONAL LETTER

1416 Lola Lane
Euless, Texas 76022
January 6, 1978

Mr. Clarence Stillman, Publisher
Cragmont Publishing Company
2913 Arkansas Lane
Arlington, Texas 76010

Dear Clarence,

Thank you for the complimentary copy of your new edition of Practical Bookkeeping. Both you and John have done some fine work in this revision and I like many of the features you have added.

Best of luck to both of you and the success of this new edition.

Very truly yours,

Betty Penny

PUBLIC RELATIONS LETTER

July 2, 1978

Mr. T. E. Joseph
Public Relations Representative
Aztrac Manufacturing Company
Greenville, Texas 75429

Dear Mr. Joseph:

Thank you for speaking at our June Office Education Association meeting. Your topic choice was a timely one.

Enclosed is a list of reactions by the members who attended the meeting. As you will see, you made a great impression on them. They not only enjoyed the way you presented your topic, but they also enjoyed your delightful sense of humor.

If we can ever be of service to you, please let us know.

Sincerely yours,

Antone Gillings
VOE Teacher/Coordinator

ris

Enclosure

SALES PROMOTION LETTER

October 10, 1977

Mr. T. M. Brown
Purchasing Department
Extron Reproductions
1716 Hershey Blvd.
Bedford, Texas 76021

Dear Mr. Brown:

A poorly operating reproduction machine results in unnecessary company expenses. You can rid yourself of this problem by installing a Retrition 700. This machine delivers a clear copy every four seconds.

The Retrition 700 is just one of a full line of reproduction machines that our representative is ready to demonstrate to you. You can buy this efficient equipment or lease it.

If you will complete and mail the enclosed card, our representative will call to give you more complete information about the Retrition 700.

Yours truly,

Faye Turner
Sales Representative

ris

Enclosure

LETTER PURCHASING GOODS AND SERVICES

January 13, 1978

Mr. Raymond Klug
Sales Representative
Wiltmire Manufacturing Company
1927 Belmont Blvd.
Kennedale, Texas 76060

Dear Mr. Klug:

In reference to our recent telephone conversation, please ship the following order #E11178 by Central Van Lines no later than February 24, 1978:

Quantity	Part and #	Quoted Price
2	Patcher Belt #10711	19.78 ea.
1	Chain Link CD109	9.50/yd.
1 cn	50 gal. Spitzlak CX90	38.70

If there are any problems in this order or its shipment, please call me. Thank you for your help.

Sincerely yours,

Al Bedshire
Purchasing Agent

ris

LETTER OF REQUEST

January 17, 1978

ABC Office Supply Company
1212 Main Street
Mansfield, Texas 76063

Gentlemen:

Please send me a copy of your "Office Supplies Guide" as advertised in the January issue of the Businessmen's Journal.

Thank you.

Sincerely,

Ted Kibart
Purchasing Manager

ris

REPORT

NEEDS ASSESSMENT - COMPUTER SERVICES

Mr. Ron Blackledge, President
Roane County Computer Corporation
Harriman, Tennessee

As you know, I recently spent four months surveying Roane County to assess the needs of computer services to local R Tri C businesses through the Roane County Computer Corporation. Since the company would provide this service at night and on weekends, there would be no interference in the regular work day. This service would provide greater income than expense to R Tri C and would be an invaluable asset to the business community. Here is a brief report:

Roane County businessmen were surveyed through a questionnaire to determine their needs and opinions of computer service at various rates.

Statistics compiled show that at the present quoted rate, firms could use our facilities at one-fifth less capital expenditures than those of Greenville Bank & Trust Computer Services, the firm with whom most Roane County businesses are now under contract.

The majority of the smaller businesses, who use no computer service, felt our service would be of no benefit to them due to their size. However, Rother Bros. and James Rager Industries felt that at our rates, they would be at an advantage by contracting our services.

As a result of the survey, I feel we should make this service available to Roane County businesses. Further research should be conducted soon.

To implement this service most effectively, I recommend:

- 1) Further economic research studies be completed and kept up-to-date with current costs,
- 2) The number of businesses to be accommodated be specified (maximum and minimum),
- 3) Specific rules, regulations, and policies be drawn up for this service, and
- 4) Accounting record changes be evaluated as to change in income and expense at specified times during the initial years of the program.

Tom O'Quin

LETTER REQUESTING A RESERVATION

August 13, 1978

Monteleone Hotel
1376 Rice Blvd.
New Orleans, Louisiana 71732

Gentlemen:

Please reserve a single room for T. R. Davis for September 8-10, 1978. He will arrive after 6:30 p.m. Monday and leave before noon Wednesday. He will be attending the Data Processing Convention at the Monteleone.

Please send a confirmation at your earliest convenience.

Sincerely yours,

BELLMONT CORPORATION

Sue Fremont
Secretary

SOCIAL LETTER

May 31, 1978

Mrs. Marie Zigler
306 Mount Circle
Dallas, Texas 75602

Dear Marie,

Your contribution of time and effort in behalf of the young people of this community is sincerely appreciated by every parent.

I have heard wonderful comments on your successful fund-raising drive. The young people will enjoy the fruits of your labor for years to come.

It is people like you who make our community such an outstanding place to live. I'm happy to have had the opportunity to work with you.

Sincerely,

Lois Stevens,
Vice-Principal

ris

LETTER OF TRANSMITTAL

February 16, 1978

Mrs. Lillian McRoberts
2629 Briardale
Forney, Texas 75201

Dear Mrs. McRoberts:

The legal papers which we discussed during our recent telephone conversation are enclosed for your consideration and signature.

Please read each paragraph carefully to determine if the information is correct. If you are in full agreement, place your signature on the three lines marked with a red "X" and return the papers to me.

As soon as I receive the papers, I will notify Mr. Thompson of your approval, and he can continue with the sale as scheduled.

Yours truly,

J. B. Turner
Attorney-At-Law

ris

Enclosure

The
Heading

federal savings & loan association
2311 commerce street austin, texas 90321
p.o. box 4511 telephone-area code-(512) 741-9311

Letterhead

September 7, 1977 ← Date line

The
Opening

Mr. and Mrs. John Smith
203 Carter ← Inside Address
San Marcos, Texas 76304

Dear Mr. and Mrs. Smith: ← Greeting

Thank you for placing your savings at Federal Savings. We take this opportunity to say we appreciate your business and to enclose your savings book.

The
Body

If you should have additional money which you wish to save for the future, we hope you will deposit with us.

Please let us know if we can be of further service.

Sincerely, ← Complimentary closing

The
Closing

J. Edward Borden ← Identification of writer
President

JEB:s ← Reference initials

Enclosure ← Enclosure notation

cc: J. R. Malone ← Carbon copy notation

The four parts of a Business Letter
(BLOCKED STYLE)

The Heading {

PARKER OIL COMPANY
INTEROFFICE MEMO _____

The Subject →

TO: Mr. John Jones, Sales Manager
FROM: Ms. Carol Weaver, Purchasing Secretary
SUBJECT: Office desks for Sales Department
DATE: June 21, 1977

The Message {

Your purchase order for secretarial desks has been received. These were ordered on June 17 from Ace Office Supply and should arrive no later than July 10, 1977.

If you have any questions, call Extension 419.

CW

THE MAIN PARTS OF A MEMORANDUM

federal savings & loan association
2311 commerce street austin, texas 78703
p.o. box 4511 telephone-area code-(512) 741-9311

June 22, 1977

Mr. and Mrs. Earl Jones
2212 Azalea Lane
San Marcos, Texas 76304

Dear Mr. and Mrs. Jones:

Thank you for your most recent deposit to your savings account. You certainly display an interest in your future as shown by your regular deposits.

If we can be of service to you in any other area of your financial planning, please let us know. Enclosed is a brochure explaining our services.

Sincerely yours,

J. Howard Borden
President

JHB:s

enclosure

EXAMPLE OF A BLOCKED BUSINESS LETTER

federal savings & loan association
2311 commerce street austin, texas 78703
p.o. box 4511 telephone-area code-(512) 741-9311

June 22, 1977

Mr. and Mrs. Earl Jones
2212 Azalea Lane
San Marcos, Texas 76304

Dear Mr. and Mrs. Jones:

Thank you for your most recent deposit to your savings account. You certainly display an interest in your future as shown by your regular deposits.

If we can be of service to you in any other area of your financial planning, please let us know. Enclosed you will find a brochure explaining our services.

Very truly yours,

J. Howard Borden
President

JHB:s

enclosure

EXAMPLE OF A MODIFIED BLOCKED BUSINESS LETTER

UNIT VI

WRITTEN COMMUNICATION

ASSIGNMENT SHEET #1--LABELING THE PARTS OF A BUSINESS LETTER

Directions: For numbers 1-9, name the parts of the following letter. For number 10, name the letter style which was used.

federal savings & loan association
 2311 commerce street austin, texas 90321
 po. box 4511 telephone-area code-(512) 741-9311

1. _____

June 17, 1977 2. _____

Mr. and Mrs. Jas. Young
 9311 Bluebird Ln.
 Austin, Texas 76202

3. _____

Dear Mr. and Mrs. Young: 4. _____

Thank you for opening your new savings account
 with us. We always appreciate the opportunity
 to serve new residents such as you.

5. _____

If we can be of further service to you, please
 call.

Sincerely, 6. _____

7. _____

J. Howard Borden
 President

ss

8. _____

cc: J.R. Malone 9. _____
 Jack Kerr

10. _____

UNIT VI

WRITTEN COMMUNICATION

ASSIGNMENT SHEET #2--LABELING THE FOUR MAIN
SECTIONS OF A BUSINESS LETTER

Directions: In spaces #1-4, label the four main sections of the following business letter. Also, in space #5 state the style of the letter.

_____ 1. First Security Bank
1611 Commerce Street P.O. Box 6600
Wylie, Texas 76608 Telephone: 214
311-7711

July 1, 1978

_____ 2. Mr. and Mrs. Jack Smith
100 Carter
San Marcos, Texas 71102

Dear Mr. and Mrs. Smith:

_____ 3. Enclosed is your savings book. We
appreciate your opening an account at
First Security.

Please call or come in to see us
anytime we can be of service.

_____ 4. Sincerely,

T. Edward Smith, President

ss
Enclosure
cc: N. P. Loyd

_____ 5.

UNIT VI
WRITTEN COMMUNICATION

ASSIGNMENT SHEET #3--LABELING THE THREE MAIN
SECTIONS OF A MEMORANDUM

Directions: In spaces #1-3, label the three main sections of the following memorandum.

- _____ 1. Jackson Oil Company
- _____ 2. TO: Mr. John Smith, Sales Manager
FROM: Ms. Carol Jones, Purchasing Secretary
SUBJECT: Office desks for Sales Department
DATE: June 1, 1978
- _____ 3. Your purchase order for secretarial desks has been received and the desks were ordered on June 10 from Ace Office Supply. You should be receiving the desks no later than July 1, 1978.

If you have any questions, call me at extension 200.

cj

UNIT VI

WRITTEN COMMUNICATION

ASSIGNMENT SHEET #4--WRITING A PERSONAL LETTER

Directions: Rewrite the following personal letter in its correct form. (Note: typing is optional)

1243 Johnson Avenue
Kansas City, Missouri 76205
May 5, 1977

Dear Jane,

Just a quick note to tell you that I plan to phone you when my plane lands in Houston Tuesday, October 21.

Mother, Dad, Jerry, and I are going to Greece for a vacation. We arrive at 3:25 p.m. and stay on the ground for about 30 minutes. I hope I can reach you while we are there.

So, if you are home, stay close to the telephone. It will be fun to talk with you again.

Sincerely,

Kathy

UNIT VI

WRITTEN COMMUNICATION

ASSIGNMENT SHEET #5--WRITING A
"MODIFIED-BLOCK" BUSINESS LETTER

Directions: Rewrite the following business letter in modified-block style using fewer words and paragraphs (Note: typing is optional)

310 Pebble Springs
Dallas, Texas 64622
November 5, 1977

Arts and Crafts, Inc.
Delco Building
Columbus, Ohio 69710

Gentlemen:

I wish to buy one of the needlepoint kits advertised in the July issue of Today's Woman magazine.

Please send me Catalog Number 10-13A. I am enclosing a check for \$18.95.

Please send the kit to me at the address given at the top of this letter.

Yours truly,

Ann Davis

Enclosure

UNIT VI
WRITTEN COMMUNICATION

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

1. Letterhead
2. Date
3. Inside address
4. Greeting
5. Body
6. Complimentary closing
7. Identification of writer
8. Reference initials
9. Carbon copy notation
10. Business letter "Modified-Block"

Assignment Sheet #2

1. Heading
2. Opening
3. Body
4. Closing
5. Full-Blocked Style

Assignment Sheet #3

1. Heading
2. Subject
3. Message

Assignment Sheet #4

1243 Johnson Avenue
Kansas City, Missouri 76205
May 5, 1977

Dear Jane,

Just a quick note to tell you that I plan to phone you when my plane lands in Houston Tuesday, October 21.

Mother, Dad, Jerry, and I are going to Greece for a vacation. We arrive at 3:25 p.m. and stay on the ground for about 30 minutes. I hope I can reach you while we are there.

So, if you are home, stay close to the telephone. It will be fun to talk with you again.

Sincerely,

Kathy

Assignment Sheet #5

310 Pebble Springs
Dallas, Texas 64622
November 5, 1977

Arts and Crafts, Inc.
Delco Building
Columbus, Ohio 60710

Gentlemen:

Enclosed is my check for \$18.95 to purchase the
needlepoint kit Catalog Number 10-13A as advertised in the
July, 1978 issue of Today's Woman.

Thank You

Yours Truly,

Ann Davis.

Enclosure

UNIT VI

WRITTEN COMMUNICATION

UNIT TEST

1. A. Identify true statements about different types of communication by placing a "✓" on the space at the left.
- ___ 1. When writing a collection letter, always remind the customer that the account is past due and you need the money.
 - ___ 2. When writing for an appointment, keep the letter very informal and ask if the date requested is open.
 - ___ 3. Adjustment letters are usually written in response to claims and usually tell what you will do to correct the problem
 - ___ 4. Acknowledgment letters indicate that correspondence will be delayed.
 - ___ 5. Credit letters to new customers should express pleasure and describe the privileges available to the customer.
 - ___ 6. Follow-up letters are often sent after a phone call to put in writing those things talked about on the phone.
 - ___ 7. Form letters are prepared to handle routine correspondence.
 - ___ 8. After a company looks into an applicant's credit rating, they usually write to either accept or reject the person's credit.
 - ___ 9. In preparing a form letter, the body of the letter may be duplicated in advance with the date, inside address, salutation, and other information added when needed.
 - ___ 10. Directives are instructions from the company buying goods.
 - ___ 11. Letters of inquiry usually request information or needed data.

- ___ 12. Memorandums are typed notes reminding the executive to keep scheduled appointments.
- ___ 13. Personal letters usually have an informal tone and have no set form required for writing.
- ___ 14. Public relations can be handled very well through writing letters of congratulations or by offering to be of service.
- ___ 15. Memorandums replace formal correspondence within a company by using informal form to relay messages from one department to another.
- ___ 16. Letters which order goods are considered as purchasing orders and require complete accuracy.
- ___ 17. Most promotion letters are written for the purpose of giving someone a promotion within the company.
- ___ 18. Letters which include business reports usually present facts and ideas and are written to cover a single situation or to cover all of a project.
- ___ 19. Letters of request must be written clearly, well-organized, complete, and concise.
- ___ 20. Exact time and date of arrival as well as accommodations are usually required in letters.
- ___ 21. Social letters are written on a personal basis about topics of concern, and business matters are usually not included.
- ___ 22. When sending a check, a money order, or an important business paper, a transmittal letter should also be sent.
- ___ 23. When writing for reservations, one should ask about any special rates because of a convention or company business.
- ___ 24. Report letters contain an introduction, a body, a conclusion, and recommendations.

- ___ 25. When writing collection letters, be sure to state the final date when bills can be paid.
- ___ 26. Well-stated suggestions will tend to help the reader want to do what you suggest.

B. Match the terms on the left with the definitions on the right. (NOTE: some answers may be used more than once)

- | | |
|--|---------------------|
| ___ 1. letter to friend or relative | a. memorandum |
| ___ 2. written to conduct business for companies and organizations | b. personal letter |
| ___ 3. developed to save time | c. business letter |
| ___ 4. a person writing an appliance company about a refrigerator | d. telegram |
| ___ 5. used to communicate with employees within the company | e. promotion letter |
| | f. COD |
| | g. follow-up letter |

C. Choose the following answer which best fits the statement or question in the blank provided.

- ___ 1. What part (s) are left out of a memo?
- a. subject
- b. date
- c. inside address, greeting and closing
- ___ 2. A business letter
- a. should be personal
- b. should be effective in accomplishing its purpose
- c. should only be used by very large companies

- ___ 3. In a personal letter, you could
- a. indent paragraphs five spaces
 - b. block paragraphs
 - c. semi-block paragraphs
 - d. all of the above
- ___ 4. An inside address is
- a. the address on the envelope
 - b. the address of the person writing the letter
 - c. the address of the person or company receiving the letter
- ___ 5. Which of the following are the correct four parts of a business letter?
- a. top, center, middle, bottom
 - b. signature, initials, carbon, body
 - c. heading, opening, body, closing
 - d. none of the above
- ___ 6. The opening of a business letter includes:
- a. date and subject
 - b. message of the letter
 - c. letterhead
 - d. inside address and date line
- ___ 7. The three correct parts of a memorandum are:
- a. signature, body, heading
 - b. heading, subject, message
 - c. subject, heading, signature
 - d. none of the above

2. Identify true statements dealing with human relations by placing a "✓" on the line to the left of each.

- ___ a. when writing, place oneself in the reader's position
- ___ b. never create a "you" attitude
- ___ c. always suggest rather than demand
- ___ d. avoid making accusations
- ___ e. a positive attitude is not always necessary

3. A. List the four factors concerning eye appeal.

- 1.
- 2.
- 3.
- 4.

- B. Place a "✓" on the line to the left of each statement that will influence the reader.

- ___ 1. If everything is correct, the person receiving the letter will know your company takes pride in its work
- ___ 2. Long paragraphs should never be broken into smaller ones
- ___ 3. Avoid paragraphs which consist of seven or more lines
- ___ 4. Spelling and punctuation errors can be damaging to the letter and draw attention from the message
- ___ 5. Typing the name below the signature of the person writing the letter is not necessary

4. Place a "✓" on the blank line to the left of those statements which are true in planning and composing written communication.
- ☐ a. Always make a list of the specific details which you want to include in the correspondence.
 - ☐ b. Be as brief as possible in conveying the message.
 - ☐ c. Jot down ideas as they come to mind.
 - ☐ d. It is a good idea to repeat the key thought of the letter at least twice.
 - ☐ e. It makes no difference about the sequence of points in a letter as long as the points are kept in the same paragraph.
 - ☐ f. The first sentence of the letter should include a greeting.
 - ☐ g. Make an effective closing sentence.
 - ☐ h. Think of every point you need to include in the communication.
 - ☐ i. Review the message to be sure the information is presented in a concise, complete, clear, correct, and courteous manner.
5. Demonstrate the ability to:
- a. Label the parts of a letter
 - b. Label the four main sections of a business letter
 - c. Label the three main sections of a memorandum
 - d. Write a personal letter
 - e. Write a "modified block" business letter
- (NOTE: If these activities have not been accomplished prior to the test, ask the instructor when they should be completed.)

UNIT VI
WRITTEN COMMUNICATION

ANSWERS TO UNIT TEST

1. A. 1. ✓ 7. ✓ 13. ✓ 19. 25.
 2. ✓ 8. ✓ 14. 20. ✓ 26.
 ✓ 3. ✓ 9. ✓ 15. ✓ 21.
 4. 10. ✓ 16. ✓ 22.
 ✓ 5. ✓ 11. 17. ✓ 23.
 ✓ 6. 12. ✓ 18. ✓ 24.

- | | |
|--------------------|--------------------|
| B. <u> b </u> 1. | C. <u> c </u> 1. |
| <u> c </u> 2. | <u> b </u> 2. |
| <u> a </u> 3. | <u> d </u> 3. |
| <u> c </u> 4. | <u> c </u> 4. |
| <u> a </u> 5. | |

2. ✓ a. ✓ c. e.
 b. ✓ d.

3. A. 1. The letter which is neat and attractive give a good impression.
2. A favorable appearance creates an interest in and a respect for the writer.
3. The message should be arranged so that the width is in balance with the length of the letter.
4. Typing should be clear and easy to read.

B. ☒ 1.

☒ 3.

☐ 5.

☐ 2.

☒ 4.

4. ☒ a.

☐ e.

☒ i.

☒ b.

☐ f.

☒ c.

☒ g.

☐ d.

☒ h.

5. Evaluated to the satisfaction of the instructor.

UNIT VII

CLERICAL RECORDKEEPING

UNIT OBJECTIVE

After completing this unit, the student should be able to identify and explain terms dealing with cash receipts records, change-making procedures, and cash payments. The student should also be familiar with the correct procedures when making change. This knowledge will be evidenced through demonstration and by successfully completing a unit test.

SPECIFIC OBJECTIVES

After completing this unit of instruction, the student should be able to:

1. Identify basic terms dealing with cash receipts
2. Determine correct change-making procedures
3. List the four types of business checks
4. Define terms dealing with cash payments
5. Label different cash receipts with their correct titles
6. Demonstrate the ability to role-play change-making
7. Label different business checks with their correct titles

UNIT VII
CLERICAL RECORDKEEPING

SUGGESTED ACTIVITIES

- I. Instructor
 - A. Provide objective sheet
 - B. Discuss objective sheet
 - C. Pass out information sheet
 - D. Discuss information sheet
 - E. Make and show transparencies
 - F. Distribute and discuss assignment sheets
 - G. Demonstrate procedures outlined in assignment sheets
 - H. Give test and review any questions missed
- II. Student
 - A. Read and discuss objective sheet
 - B. Read and discuss material contained in information sheet
 - C. Complete assignment sheets
 - D. Take test

INSTRUCTIONAL MATERIALS

- I. Included in this unit:
 - A. Objective sheet
 - B. Information sheet
 - C. Transparency masters
 - 1. VII-TM-1--Cash Register Tape, Sales Slip, and Sales Receipt

2. VII-TM-2--Cash Refund Slip
3. VII-TM-3--Cash Payment Records
4. VII-TM-4--Check with Stub and Check with Voucher.
5. VII-TM-5--Checkbook Register and Check With Information on Face
6. VII-TM-6--Invoice, Receiving Report, and Purchase Order

D. Assignment Sheets

1. Assignment Sheet #1--Labeling Cash Receipts
2. Assignment Sheet #2--Role-playing Change-making
3. Assignment Sheet #3--Labeling Business Checks

E. Answers to assignment sheets

F. Test

G. Answers to test

II. References: Books

- A. Baron, Harold and Solomon C. Steinfeld. Clerical Record Keeping. 3rd ed. Cincinnati: South-Western Publishing Company, 1971.
- B. Huffman, Harry and Jeffrey R. Stewart. General Recordkeeping. 5th ed. Dallas: Gregg Division, McGraw-Hill Book Company, 1976.

UNIT VII
CLERICAL RECORDKEEPING

INFORMATION SHEET

I. Handling Cash

A. Cash

1. Can also be called currency, which includes paper money and coins
2. A business also sees cash as including checks and deposits

B. Cash receipts--Money that a business receives

C. Cash records

1. Written account of the amount of money on hand
2. Important because cash can be easily stolen or lost
3. Help employers make decisions, for example, to pay bills, buy equipment and supplies, or to hire new employees

D. Safe places to keep cash

1. Locked cash box
2. Cash register
3. Locked cash drawer
4. Wall or cabinet safe

E. Methods of keeping sales records (see TM-1)

1. Sales slip--Small piece of paper which has space to put the number of articles, a description, and the price of the goods
2. Cash register tape--A sales record having two copies: one tape is given to the customer, while a copy is kept inside the cash register
3. Sales receipt--Handwritten record given for a purchase or service

F. Cash refund slip--A form filled out when a customer returns an item for a cash refund (TM-2)

1. Some businesses do not allow cash refunds; instead, they give the customer credit for another purchase .
2. Refund slips are usually different from business to business

G. Change fund--Money put in cash register at the beginning of each day to use for making change

H. Proof of cash

1. Cash in register is checked against the sales records each day
2. The cash on hand must equal the total of the sales receipts and cash paid out

I. Advantages of using cash register

1. Provides a place to keep cash
2. Aids in accurate recordkeeping

J. Check approval

1. Before accepting a check, always look at
 - a. the signature
 - b. the customer's name
 - c. the amount of the check .
2. Be sure of customer's identity by checking
 - a. driver's license
 - b. credit card
 - c. employment or student identification card, etc.

II. Change-making Procedures

- A. Greet the customer
- B. Accept tab and money from customer
- C. Be sure the tab or sales slip has no errors

- D. Look at the customer and state the amount due, then state the amount of money the customer has given you

(Example: "That will be ten dollars and twenty-two cents out of twenty dollars.")

- E. Place the money received to one side of the cash drawer or on the money slab, and the sales slip in the place provided for it

- F. Record the amount due on the cash register

- G. Count the change as you take it from the cash drawer. A cashier should be able to figure the amount of change without using a pencil and paper if there is not a change return

- H. Count change back to the customer out loud, beginning with the amount of the bill

1. Use the change return, if available, for coins

- a. Check the coin cup for the correct change by looking in the cup

(Note: It is easy to press wrong keys, so always double-check the cup.)

- b. Count out change from the smallest to largest amount.

2. Hand any paper money to the customer with the face up

(Example: "That will be two dollars and thirty-five cents out of five dollars. Two thirty-five "\$2.35", two forty "\$2.40", two fifty "2.50", two seventy-five "\$2.75", "\$4.00", and five "\$5.00".)

- I. Always thank the customer

- J. Place the money the customer gave you in the cash drawer

- K. Close the cash register drawer

(Caution: Don't close the cash register drawer on your fingers.)

III. Cash payments--Cash paid out by a business

A. Check

1. Voucher check--Check with a part that serves as a record of why check was written (TM-4)
2. Check with stub (TM-4)--Stub is attached as a permanent record for reason and amount of check
3. Check with register (TM-6)--Register is a book made up of several pages to provide a record of all checks written and deposits made
4. Check with information on face (TM-6)

B. Petty cash--Amount of cash set aside to pay for small business expenses (See Unit VIII)

C. Payments are usually made by check when company receives:

1. Invoice--Bills received by a business for goods bought
2. Purchase order--Form used for ordering merchandise
3. Receiving report--Form showing what merchandise the company received

(NOTE: Look over the invoice to make sure it is correct)

CASH REGISTER TAPE

SALES SLIP

SALES RECEIPT

CASH PAYMENT RECORDS

Is the writing
in ink and legible?

Is the payee's
name correct?

Is the check
correctly dated?

PAY TO THE ORDER OF

HOME TOWN BANK
Your Town, Texas

175

00-2398
1189

19__ 11 18

\$

DOLLARS

⑆ 5 1 1 9 ⑆ 2 3 9 8 ⑆ ⑆ 2 1 8 ⑆ 2 3 1 ⑆ 7 ⑆

Do the amounts
agree?

Is the check signed?
Does the drawer have
identification?

DL# 6100562

CREDIT CARD
0022-333-672431

Driver's License number and
Credit Card account number
on back of check as proof
of identification.

EXAMPLES OF CHECK WITH STUB AND CHECK WITH VOUCHER

NO. _____ \$ _____ DATE _____ 19____ TO _____ FOR _____ <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">BALANCE</td> <td style="width: 50%; text-align: center;">DOLLARS CENTS</td> </tr> <tr> <td>AMT. DEPOSITED</td> <td></td> </tr> <tr> <td>TOTAL</td> <td></td> </tr> <tr> <td>AMT. THIS CHECK</td> <td></td> </tr> <tr> <td>BALANCE</td> <td></td> </tr> </table>	BALANCE	DOLLARS CENTS	AMT. DEPOSITED		TOTAL		AMT. THIS CHECK		BALANCE		10-9 888 NO. _____ PAY TO THE ORDER OF _____ 19____ \$ _____ _____ DOLLARS ⑆0225⑈0005 247⑈027720⑈
BALANCE	DOLLARS CENTS										
AMT. DEPOSITED											
TOTAL											
AMT. THIS CHECK											
BALANCE											

NO. 344						
INVOICE NUMBER	INVOICE DATE			GROSS AMOUNT	DISCOUNT	NET AMOUNT
	MO	DAY	YR			

DETACH BEFORE DEPOSITING CHECK

NO. 344			
---------	--	--	--

MO	DAY	YR	PAY TO THE ORDER OF	AMOUNT

_____ DOLLARS

AUTHORIZED SIGNATURE

⑆1449⑈0119⑆ ⑈19 644 2⑈

CHECKBOOK REGISTER AND CHECK

CHECK IN PAYMENT OF THE FOLLOWING					
Date	Amount				
TOTAL INVOICES					
LESS DISCOUNT					
LESS PREPAID					
NET TOTAL					

CORRECT ENDORSMENT IS RECEIPT

NO.

PAY TO THE ORDER OF

19 _____ \$ _____ DOLLARS

Authorized Signature

⑆ 6669-0169C # 19 666 2P

[illegible]

Register—Left Side

[illegible]

Register—Right Side

EXAMPLES OF AN INVOICE, RECEIVING REPORT AND PURCHASE ORDER

ACME OFFICE SUPPLY 207 W. Commerce Dallas, Texas 75201		INVOICE NO. 6235 Date 5/15/77 Terms Cash Purchase Order No. 5131		
Morrison Real Estate Sold To: 202 W. College Richardson, Texas 60321				
QUANTITY	STOCK NO.	DESCRIPTION	UNIT PRICE	AMOUNT
6	#53	Correction Tape	3.00	18.00
1	#A2	Stapler	4.00	4.00
			Subtotal	22.00
			Shipping	3.26
			TOTAL	25.26

MORRISON REAL ESTATE		
RECEIVING REPORT		
Received From: Acme Office Supply 207 W. Commerce Dallas, Texas 75201		Date 5-26-77 Counted By: O.K.
Via		
QUANTITY	DESCRIPTION	
6	#53 Correction Tape	OK
1	#A2 Stapler	OK

MORRISON REAL ESTATE 202 W. College Richardson, Texas 60321		PURCHASE ORDER NO. 5131		
To: Acme Office Supply 207 W. Commerce Dallas, Texas 75201				
F.O.B.	ITEMS NEEDED BY:	TERMS	VIA	DATE
QUANTITY	STOCK NO.	DESCRIPTION	UNIT PRICE	AMOUNT
6	#53	Correction Tape	3.00	18.00
1	#A2	Stapler	4.00	4.00
BY: _____ Purchasing Agent				

UNIT VII

CLERICAL RECORDKEEPING

ASSIGNMENT SHEET #1--LABELING CASH RECEIPTS

Directions: Label each of the following receipt forms with its correct name:

DUNSTON'S
JAN 10

\$ 006.98	GR	Grocery
000.00	HT	Hosiery
000.00	PR	Most
000.00	PR	Produce
000.00	PR	
000.00	PR	
000.00	PR	Total Amount
000.00	PR	
000.00	TLA	Amount taken
000.00	AT	from customer
000.00	CMA	Change
\$ 01.53		

YVS.8665127

[illegible]

No. 4

19

Received from _____

_____ Dollars

FOR _____

☒ Check ☐ Cash ☐ _____

UNIT VII

CLERICAL RECORDKEEPING

ASSIGNMENT SHEET #2--ROLE-PLAYING CHANGE-MAKING

Directions: Use play money and act out each of the situations below. Role-play any others which you have had problems. Ask for class help in solutions.

Situation #1

Student is to take customer's check totaling \$19.41. The customer gives the cashier a \$20 bill. The cashier returns the correct change by following the proper procedures listed on Information Sheet, Section II.

Situation #2

Student is to take customer's check totaling \$25.10. The customer gives the cashier a \$50 bill. The cashier returns the correct change by following the proper procedure under change-making procedure.

Situation #3

Student is to take customer's check totaling \$32.60. The customer also asks for two candy mints at 5¢ each and a package of gum at 16¢. The customer gives the cashier \$40. The cashier gives correct change by following the procedures listed under change-making.

UNIT VII

CLERICAL RECORDKEEPING

ASSIGNMENT SHEET #3--LABELING BUSINESS CHECKS

Directions: Label each of the following business checks with its correct title:

CHECKS TO PAYMENT OF THE FOLLOWING		
Date	Amount	NO.
TOTAL DOLLARS		
LESS DISCOUNT		
LESS FEE PAID		
NET TOTAL		

CHECKS DEPOSITED IN RECEIPT _____

PAY TO THE ORDER OF _____ \$ _____ DOLLARS

Authorized Signature

6809-0119C P19 680 20

1. _____

NO. _____ 9
DATE _____ 79
TO _____
FBI _____

PAY _____ 19
TO THE _____
ORDER OF _____ 9
_____ DOLLAR

BALANCE
NOT DEPOSITED
TOTAL
OFF THIS ORDER
BALANCE

⑆0225⑉005 247⑉0??20⑆

2. _____

[illegible]

175

10

9

BOOK 145

HOME TOWN BANK
Your Town, Texas

69119-2398C P 218-231-7P

INVOICE NUMBER		INVOICE DATE		GROSS AMOUNT	DISCOUNT	NET AMOUNT
		MO	DAY YR			
DETACH BEFORE DEPOSITING CHECK						

NO. 548

MO	DAY YR	PAY TO THE ORDER OF	AMOUNT

_____ DOLLARS

_____ AUTHORIZED SIGNATURE

03449-0119C 059 644 20

3. _____

4. _____

UNIT VII
CLERICAL RECORDKEEPING

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

1. Cash register tape
2. Sales slip
3. Sales receipt

Assignment Sheet #2

1. Nineteen forty-one. Two, three, four, forty-five, fifty and twenty. Thank you.
2. Twenty-five dollars and ten cents. Twenty, twenty-five, fifty, seventy-five, twenty-six dollars, twenty-seven dollars, eight, nine, thirty dollars, forty and fifty. Thank you.
3. Thirty-two dollars and sixty cents out of forty dollars. Thirty-two dollars and eighty-six, eighty-seven, eighty-nine, thirty-three dollars, four, five and forty dollars. Thank you.

Assignment Sheet #3

1. Check with information on face
2. Check with stub
3. Check with register
4. Check with voucher

UNIT VII
CLERICAL RECORDKEEPING

UNIT TEST

1. Circle the word(s) that best complete the following statements about cash receipts:
 - a. Cash is the same thing in a business as:
 1. check
 2. voucher
 3. receipt
 - b. When a business receives cash, it is called a:
 1. cash receipt
 2. cash payment
 3. cash benefit
 - c. Cash can be easily:
 1. recorded
 2. deposited
 3. stolen or lost
 - d. One of the best ways to protect cash is to use:
 1. a cash register
 2. a desk drawer
 3. an envelope
 - e. One of the three methods of keeping sales records is by:
 1. voucher
 2. sales slip
 3. balance sheet

- f. _____ must be examined before a check is accepted.
 1. check number
 2. bank
 3. signature
 - g. One of the most common forms of a proof of identity is
 1. birth certificate
 2. driver's license
 3. Social Security number
 - h. One reason cash registers are used - - -
 1. accurate recordkeeping
 2. gives a business-like atmosphere
 3. required by federal law
 - i. Cash that is placed in the cash register at the beginning of the day for making change is called:
 1. cash over
 2. change fund
 3. inventory
2. Place a "✓" beside those statements that are true concerning change-making.
- _____ a. Greet the customer.
 - _____ b. Be sure the check has no errors.
 - _____ c. While making change, place the customer's cash on the money slab or cash drawer.
 - _____ d. Cashiers are not responsible for the money in their register.
 - _____ e. Record the amount of the check on the cash register.

- _____ f. A good cashier will always thank the customer.
 - _____ g. Hand bills to the customer face down.
 - _____ h. Count change back to the customer, quietly and to yourself, beginning with the amount of the bill.
 - _____ i. Most cash registers have a safety device that won't allow the cashier to get fingers mashed by the register drawer.
 - _____ j. Before counting money back to the customer, file the bill received.
3. List the four types of business checks:
 - a.
 - b.
 - c.
 - d.
 4. Label different cash receipts with correct names.
 5. Role-play change-making.
 6. Label different business checks with their correct names.

(Note: If activities #4--#6 have not been completed prior to the test, ask the instructor when they should be completed.)

UNIT VII

CLERICAL RECORDKEEPING

ANSWERS TO UNIT TEST

1. a. 1 f. 3
b. 1 g. 2
c. 3 h. 1
d. 1 i. 2
e. 2
2. a. ✓ f. ✓
b. ✓ g.
c. ✓ h.
d. i.
e. ✓ j.
3. a. 1. checks with vouchers
2. checks with stubs
3. checks with registers
4. checks with details printed on the face
4. Evaluated to the satisfaction of the instructor.
5. Evaluated to the satisfaction of the instructor.
6. Evaluated to the satisfaction of the instructor.

UNIT VIII

HANDLING THE PETTY CASH FUND

UNIT OBJECTIVE

After completing this unit, the student should be able to perform procedures used in handling a petty cash fund. This information should be evidenced through demonstration and by successfully completing a unit test.

SPECIFIC OBJECTIVES

After completing this unit of instruction, the student should be able to:

1. State the purpose of a petty cash fund
2. Cite the three steps involved in establishing a petty cash fund
3. Select the statement which best describes the procedure used in handling a petty cash fund
4. State the function of the first and second lines of the petty cash book and the petty cash books overall purpose
5. State the reason for preparing a petty cash summary
6. Demonstrate the ability to:
 - a. Complete a voucher
 - b. Complete a petty cash summary
 - c. Keep a petty cash book

UNIT VIII
HANDLING THE PETTY CASH FUND

SUGGESTED ACTIVITIES

- I. Instructor:
 - A. Provide objective sheet
 - B. Discuss objective sheet
 - C. Provide information sheet
 - D. Discuss information sheet
 - E. Show and discuss transparencies
 - F. Provide job sheets
 - G. Discuss job sheets
 - H. Give test and evaluate results
- II. Student:
 - A. Read objective sheet
 - B. Study information sheet
 - C. Participate in discussion and view transparencies
 - D. Complete job sheets
 - E. Take test

INSTRUCTIONAL MATERIALS

- I. Included in this unit:
 - A. Objectives
 - B. Information sheet
 - C. Transparency masters
 - 1. VIII-TM-1--Petty Cash Fund
 - 2. VIII-TM-2--Petty Cash Voucher
 - 3. VIII-TM-3--Simple Petty Cash Book

4. VIII-TM-4--Petty Cash Book
 5. VIII-TM-5--Petty Cash Summary
- D. Job sheets
1. Job Sheet #1--Completing a Voucher
 2. Job Sheet #2--Keeping a Petty Cash Book
 3. Job Sheet #3--Completing a Petty Cash Summary
- E. Answers to job sheets
- F. Test
- G. Answers to test

II. References:

- A. Freeman, M. Herbert and others. Accounting 10/12. 2nd ed. New York, New York: Gregg Division, McGraw-Hill Book Company, 1973.
- B. Carson, A. B. and others. Secretarial Accounting. 9th ed. Cincinnati, Ohio: South-Western Publishing Co., 1972.
- C. Huffman, Harry and Jeffrey R. Stewart, Jr. General Recordkeeping. 7th ed. New York, New York: Gregg Division, McGraw-Hill Book Company, 1976.
- D. Brock, Horace R. and others. Accounting: Basic Principles. 3rd ed. New York, New York: McGraw-Hill Book Company, 1974.
- E. Anderson, Ruth I. and others. The Administrative Secretary. San Francisco, California: Gregg Division, McGraw-Hill Book Company, 1970.
- F. Meehan, James R. and others. Secretarial Office Procedures. 8th ed. Cincinnati, Ohio: South-Western Publishing Co., 1972.

UNIT VIII
HANDLING THE PETTY CASH FUND

INFORMATION SHEET

- I. Terms and definitions
 - A. Petty cash fund--Certain amount of money kept on hand to pay for minor items
 - B. Petty cash voucher--Written record of money taken from petty cash
 - C. Petty cash book--Record of all cash paid into or out of petty cash.
 - D. Petty cash summary--Brief report of monies paid out, money replaced, and money on hand
 - E. Replenish--To replace or refill
 - F. Withdrawal--To take out or remove
 - G. Posting--To transfer figures from a record to the petty cash book
 - H. Transaction--Perform a business deal
- II. Purpose of petty cash fund
 - A. To pay for small expenses in an office (stamps, delivery, advertising, bus fare for errands, taxi, dinner for employees who work late, office supplies, etc.)
 - B. To pay for coffee, etc.
 - C. To pay for cash on delivery (COD)
- III. Setting up a fund
 - A. Obtain required amount of money in manner set up by the company
 - B. Place money in petty cash box
- IV. Procedure for handling fund
 - A. Make a voucher for each withdrawal. Include:
 - 1. Date

2. Paid to whom
 3. For what purpose
 4. Amount
 5. Name of person approving withdrawal
- B. Place voucher in petty cash box
- C. Replenish the fund
1. When the amount of money on hand reaches a designated low level, or
 2. When certain dates are specified for replenishing
- V. Petty cash book
- A. Provides a record of all transactions
- B. Putting information in the petty cash book
- Record information from vouchers in petty cash book
- C. Closing the petty cash book
1. Total all money columns in pencil
- Example: \$ 8.00
 9.00
 10.00
 5.00
 \$32.00 ← Pencil Total
2. Check total of all the Distribution of Payments columns to be sure the amount equals the Paid Out column
 3. When columns balance, the final totals are entered
 4. Total Received and Paid Out columns
 5. Find difference between Received column and Paid Out column, which represents cash on hand
 6. Draw double rules beneath Received, Paid Out, and Date columns

7. Write how much cash is now on hand in Received column

8. Replenish fund and record in petty cash book

VI. Petty Cash Summary.

A. Prepared when the amount of cash is low, or by week or month, as required by employer

B. Lists totals of each column in Distribution of Expenses plus cash on hand (See TM-4)

PETTY CASH FUND

**PAYS FOR SMALL EXPENSES
INVOLVED IN OPERATING OFFICE**

- STAMPS
- DELIVERY
- ADVERTISING
- BUS FARE FOR ERRANDS
- TAXI FARE
- DINNER FOR EMPLOYEES
WHO WORK LATE
- OFFICE SUPPLIES

PETTY CASH VOUCHER

NO. _____

AMOUNT \$ _____

PETTY CASH VOUCHER

DATE _____

PAID TO _____

FOR _____

CHARGE TO _____

APPROVED BY _____ RECEIVED BY _____

SIMPLE PETTY CASH BOOK

[illegible]

PETTY CASH BOOK

[illegible]

PETTY CASH SUMMARY

ENDON CORPORATION
PETTY CASH SUMMARY
July 30, 1977

Advertising Expense \$73.42

Delivery Expense 26.32

Miscellaneous Expense 14.13

Office Expense 81.81

Total Petty Cash Vouchers \$195.68

Plus Cash In Box 34.32

\$230.00

UNIT VIII

HANDLING THE PETTY CASH FUND

JOB SHEET #1--COMPLETING A VOUCHER

I. Tools and equipment needed:

- A. Voucher forms
- B. Pen or pencil

II. Procedure:

From the following information, record what will be needed later. Complete a voucher for each transaction.

Assume you are cashier for Kendon Corporation. You are responsible for preparing vouchers for all petty cash paid out and for depositing \$100 in the fund each month. During July, the following transactions were made:

- July 6 Gave \$2.50 to Joyce Wilson for taxi fare (delivery service)
- July 7 Gave Henry Lockmore \$13.60 for postage stamps (office expense)
- July 8 Gave Henry Lockmore \$4.60 to buy coffee and creamer for refreshment bar (miscellaneous)
- July 12 Gave \$16.50 to Albert Jackson for repairing locks on door (miscellaneous)
- July 12 Gave Joyce Wilson \$6.40 to purchase emergency first-aid kit (miscellaneous)
- July 16 Gave Gail Freeman \$2.70 for carbon paper (office supplies)
- July 20 Gave \$10.00 to local high school paper for advertisement (advertising)
- July 23 Paid \$1.50 to Park-eze for parking fee (miscellaneous)
- July 25 Gave Henry Lockmore \$3.12 for extension cord (office)

(continued on next page)

July 29

Made \$15 donation to Red Cross (miscellaneous)

NO. _____	AMOUNT \$ _____
PETTY CASH VOUCHER	
DATE _____	
PAID TO _____	
FOR _____	
CHARGE TO _____	
APPROVED BY _____	RECEIVED BY _____

NO. _____	AMOUNT \$ _____
PETTY CASH VOUCHER	
DATE _____	
PAID TO _____	
FOR _____	
CHARGE TO _____	
APPROVED BY _____	RECEIVED BY _____

NO. _____ AMOUNT \$ _____

PETTY CASH VOUCHER

DATE _____

PAID TO _____

FOR _____

CHARGE TO _____

APPROVED BY _____ RECEIVED BY _____

NO. _____ AMOUNT \$ _____

PETTY CASH VOUCHER

DATE _____

PAID TO _____

FOR _____

CHARGE TO _____

APPROVED BY _____ RECEIVED BY _____

NO. _____ AMOUNT \$ _____

PETTY CASH VOUCHER

DATE _____

PAID TO _____

FOR _____

CHARGE TO _____

APPROVED BY _____ RECEIVED BY _____

NO. _____ AMOUNT \$ _____

PETTY CASH VOUCHER

DATE _____

PAID TO _____

FOR _____

CHARGE TO _____

APPROVED BY _____ RECEIVED BY _____

NO. _____ AMOUNT \$ _____

PETTY CASH VOUCHER

DATE _____

PAID TO _____

FOR _____

CHARGE TO _____

APPROVED BY _____ RECEIVED BY _____

NO. _____ AMOUNT \$ _____

PETTY CASH VOUCHER

DATE _____

PAID TO _____

FOR _____

CHARGE TO _____

APPROVED BY _____ RECEIVED BY _____

NO. _____ AMOUNT \$ _____

PETTY CASH VOUCHER

DATE _____

PAID TO _____

FOR _____

CHARGE TO _____

APPROVED BY _____ RECEIVED BY _____

NO. _____ AMOUNT \$ _____

PETTY CASH VOUCHER

DATE _____

PAID TO _____

FOR _____

CHARGE TO _____

APPROVED BY _____ RECEIVED BY _____

UNIT VIII
HANDLING THE PETTY CASH FUND

JOB SHEET #2--KEEPING A PETTY CASH BOOK

- I. Tools and equipment needed:
 - A. Petty cash vouchers from Job Sheet #1
 - B. Pencil
 - C. Ruler
- II. Procedure:
 - A. Using vouchers from Job Sheet #1, record each transaction which occurred during the month of July
 - B. Record total cash on hand
 - C. Take pencil foot totals
 - D. When balanced, draw two lines under the total

Continued on Next Page

SIMPLE PETTY CASH BOOK

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[illegible]

UNIT VIII

HANDLING THE PETTY CASH FUND

JOB SHEET #3--COMPLETING A PETTY CASH SUMMARY

I. Tools and equipment needed:

A. Typewriter

B. Information and vouchers from Job Sheet #4

II. Procedure:

On one-half sheet of letter size paper, prepare a Petty Cash Summary listing the total cash payments for each classification and the amount of cash on hand.

UNIT VIII
HANDLING THE PETTY CASH FUND

ANSWERS TO JOB SHEETS

Job Sheet #1

NO. <u>1</u>	AMOUNT <u>\$2.50</u>
PETTY CASH VOUCHER	
DATE <u>July 6</u>	
PAID TO <u>Joyce Wilson</u>	
FOR <u>taxi fare</u>	
CHARGE TO <u>delivery service</u>	
APPROVED BY _____	RECEIVED BY _____

NO. <u>2</u>	AMOUNT <u>\$13.60</u>
PETTY CASH VOUCHER	
DATE <u>July 7</u>	
PAID TO <u>Henry Lockmore</u>	
FOR <u>postage stamps</u>	
CHARGE TO <u>office expense</u>	
APPROVED BY _____	RECEIVED BY _____

NO. 3AMOUNT \$4.60

PETTY CASH VOUCHER

DATE July 8PAID TO Henry LockmoreFOR coffee and creamerCHARGE TO miscellaneous

APPROVED BY _____ RECEIVED BY _____

NO. 4AMOUNT \$16.50

PETTY CASH VOUCHER

DATE July 12PAID TO Albert JacksonFOR door lock repairCHARGE TO miscellaneous

APPROVED BY _____ RECEIVED BY _____

NO. 5AMOUNT \$6.40

PETTY CASH VOUCHER

DATE July 12PAID TO Joyce WilsonFOR emergency first-aid kitCHARGE TO miscellaneous

APPROVED BY _____ RECEIVED BY _____

NO. 6AMOUNT \$2.70

PETTY CASH VOUCHER

DATE July 16PAID TO Gail FreemanFOR carbon paperCHARGE TO office supplies

APPROVED BY _____ RECEIVED BY _____

NO. 7 AMOUNT \$ 10.00

PETTY CASH VOUCHER

DATE July 20

PAID TO High school paper
FOR advertisement
CHARGE TO advertising
APPROVED BY _____ RECEIVED BY _____

NO. 8 AMOUNT \$ 1.50

PETTY CASH VOUCHER

DATE July 23

PAID TO Park-eye
FOR parking fee
CHARGE TO miscellaneous
APPROVED BY _____ RECEIVED BY _____

NO. 9 AMOUNT \$ 3.12

PETTY CASH VOUCHER

DATE July 25

PAID TO Henry Lockmore
FOR extension cord
CHARGE TO office expense
APPROVED BY _____ RECEIVED BY _____

NO. 10 AMOUNT \$ 15.00

PETTY CASH VOUCHER

DATE July 29

PAID TO Red Cross
FOR donation
CHARGE TO miscellaneous
APPROVED BY _____ RECEIVED BY _____

Job Sheet #3

Kendon Corporation
Petty Cash Summary
August 1, 1977

Advertising Expense	\$ 10.00
Delivery Expense	2.50
Miscellaneous Expense	44.00
Office Expense	19.42
Total Petty Cash Vouchers	<u>\$ 75.92</u>
Plus Cash in Box	24.08
Total Petty Cash Fund	<u><u>\$100.00</u></u>

SIMPLE PETTY CASH BOOK

Date		Explanation	Received		Paid	
June	30		100	<u>00</u>		
July	6	Taxi fare			2	50
	7	Postage stamps			13	60
	8	Coffee and cream			4	60
	12	Door lock repair			16	50
	12	Emergency first-aid kit			6	40
	16	Carbon paper			2	70
	20	Advertisement			10	00
	23	Parking fee			1	50
	25	Extension cord			3	12
	29	Donation			15	00
					75	92

PETTY CASH BOOK

Date		Explanation	Vouchers	Receipts		Payments		Distribution of Payments							
								Office Supplies		Advertising		Messenger		Miscellaneous	
6	30			100	00										
7	6	Taxi fare	1			2	50					2	50		
7	7	Postage stamps	2			13	60	13	60						
7	8	Coffee and cream	3			4	60							4 60	
7	12	Door lock repair	4			16	50							16 50	
7	12	Emergency first-aid kit	5			6	40							6 40	
7	16	Carbon paper	6			2	70	2	70						
7	20	Advertisement	7			10	00			10	00				
7	23	Parking fee	8			1	50							1 50	
7	25	Extension cord	9			3	12	3	12						
7	29	Donation	10			15	00							15 00	
						75	92	19	42	10	00	2	50	44 00	

UNIT VIII
HANDLING THE PETTY CASH FUND

UNIT TEST

1. State the purpose of a petty cash fund.

2. List the three steps involved in setting up a petty cash fund.
 - a.

 - b.

 - c.

3. Select the phrase which best describes how to handle a petty cash fund. Record the number of that statement on the blank line.

_____ a. The information recorded on a voucher includes:
 - (1) Date
 - (2) Person to whom money is paid
 - (3) Purpose
 - (4) Amount
 - (5) Approval signature
 - (6) All of the above
 - (7) None of the above

- _____ b. The petty cash fund is replenished:
- (1) When all the money has been spent
 - (2) When the amount of money on hand reaches \$50.00
 - (3) On the 1st of each month
 - (4) All of the above
 - (5) None of the above
- _____ c. Petty fund accounts are replenished by:
- (1) Preparing petty cash books
 - (2) Preparing vouchers
 - (3) Writing and cashing a check for the amount of cash spent
 - (4) All of the above
 - (5) None of the above
4. a. State the purpose of the petty cash book.
- b. State the functions of the first and second lines of the petty cash book:
- (1) First Line-
 - (2) Second Line-
5. State the reason for preparing a petty cash summary.

6. Demonstrate the ability to:

- a. Complete a voucher
- b. Keep a petty cash book
- c. Complete a petty cash summary

(NOTE: If the above activities have not been completed prior to the test, ask the instructor when they should be completed.)

UNIT VIII
HANDLING THE PETTY CASH FUND

ANSWERS TO UNIT TEST

1. The purpose of a petty cash fund is to pay small amounts of cash that have been used in operating an office, such as advertising, delivery, miscellaneous, and office supplies.
2. Establishing a petty cash fund involves:
 - a. Writing a check to the person in charge of the fund.
 - b. Having the check signed and cashed by authorized person.
 - c. Placing money in petty cash box.
3. 6 a.
3 b.
3 c.
4. a. Proves the petty cash fund by organizing a record of all transactions.
 - b.
 - (1) Totals are entered.
 - (2) Record date, explanation of cash that has been used, voucher number, delivery expense, and amount paid out.
5. Prepared when the amount of cash is low.
6. Evaluated to the satisfaction of the instructor.

UNIT IX
SUPPLEMENTARY MACHINES

UNIT OBJECTIVE

After completing this unit of instruction, the student should be able to identify terms, parts, and basic procedures in operating office machines used to cut, drill, staple, fold, and bind printed material. This knowledge will be evidenced through demonstration and by successfully completing a unit test.

SPECIFIC OBJECTIVES

After completing this unit of instruction, the student should be able to:

1. Identify terms, describe procedures, and list safety rules in operating the collator
2. Match terms, discuss the purpose, and sequence steps in operating the paper cutter
3. Identify terms, list safety rules, and select procedures in operating the paper drill
4. Define the features, describe procedures, and sequence positioning steps when using the saddle-back stapler
5. Identify terms, select correct operating procedures, and list safety rules when using the paper folder
6. List features and sequence procedures when using the jogger and padding press
7. Point out the purpose, select correct terms, and select correct procedure when operating the punch and binder
8. Demonstrate the ability to:
 - a. Fan and jog paper
 - b. Load and operate the collator
 - c. Operate paper cutter
 - d. Operate paper drill

- e. Secure a saddleback stapler on table top
- f. Load the saddleback stapler
- g. Clear a staple jam
- h. Staple booklets
- i. Staple flat stacks of paper
- j. Operate the paper folder
- k. Operate the paper jogger
- l. Operate the padding press
- m. Punch and bind a book

UNIT IX
SUPPLEMENTARY MACHINES

SUGGESTED ACTIVITIES

I. Instructor:

(NOTE: This unit is sectionalized. Pull out those sections pertaining to the machines in your classroom)

- A. Provide objective sheet and information
- B. Discuss objective and information sheets
- C. Use transparency masters either as student handouts or transparencies to supplement material covered in information sheets
- D. Discuss and demonstrate procedures outlined on job sheets
- E. Secure operator's manual for the various machines in use in your classroom
- F. Provide student projects to coincide with the operation of the machines
- G. Give the unit test as it pertains to each machine
- H. Review with students any questions missed on unit test

II. Student:

- A. Read and discuss objective sheet
- B. Study information sheet and discuss points of information not understood
- C. View transparencies or jot down notes on student handouts
- D. Complete procedures outlined on job sheets
- E. Review progress in operating machines with instructor
- F. Take test and review with instructor terms missed

INSTRUCTIONAL MATERIALS

I. Included in this unit:

A. Objective sheet

B. Information sheets

1. Information Sheet--Collator
2. Information Sheet--Paper Cutter
3. Information Sheet--Paper Drill
4. Information Sheet--Saddleback Stapler
5. Information Sheet--Paper Folder
6. Information Sheet--Jogger and Padding Press
7. Information Sheet--Punch and Binder

C. Transparency masters

1. IX-TM-1--Paper Collator
2. IX-TM-2--Paper Cutter
3. IX-TM-3--Paper Drill
4. IX-TM-4--Saddleback Stapler
5. IX-TM-5--Folding Machines
6. IX-TM-6--Inserting Plates
7. IX-TM-7--Setting Upper and Lower Fold Plates
8. IX-TM-8--Setting Adjustments on the Folder
9. IX-TM-9--Jogger
10. IX-TM-10--Padding Press
11. IX-TM-11--Punch and Binder
12. IX-TM-12--Correct and Incorrect Punches

D. Job Sheets

1. Job Sheet #1--Fan and Jog Paper
2. Job Sheet #2--Load and Operate the Collator
3. Job Sheet #3--Operate Paper Cutter

4. Job Sheet #4--Operate Paper Drill
5. Job Sheet #5--Secure a Saddleback Stapler on Table Top
6. Job Sheet #6--Load the Saddleback Stapler
7. Job Sheet #7--Clear a Staple Jam
8. Job Sheet #8--Staple Booklets
9. Job Sheet #9--Staple Flat Stack of Paper
10. Job Sheet #10--Operate the Paper Folder
11. Job Sheet #11--Operate the Paper Jogger
12. Job Sheet #12--Operate the Padding Press
13. Job Sheet #13--Punch and Bind a Book

E. Unit tests

1. Unit Test--Collator
2. Unit Test--Paper Cutter
3. Unit Test--Paper Drill
4. Unit Test--Saddleback Stapler
5. Unit Test--Paper Folder
6. Unit Test--Jogger and Padding Press
7. Unit Test--Punch and Binder

F. Answer sheets for unit tests

II. References--Manuals, Publications, and Catalogs

- A. A.B. Dick Company/Duplicating Equipment Catalog. Chicago: A.B. Dick Company, 1976.
- B. Challenge Equipment Planning Guide. Grand Haven, Michigan: Challenge Machinery Company, 1974.
- C. Cogoli, John E. Photo Offset Fundamentals. 3rd ed., Bloomington, Illinois: McKnight Publishing Company, 1973.
- D. Finishing Procedures, Graphic Communications Series. Chicago: A.B. Dick Co., 1970.

- E. Graphic Communication. Jefferson City, Missouri:
Industrial Materials Laboratory, University of
Missouri, 1973.
- F. Instruction and Parts Manual for Model JO Paper
Drilling Machine. Grand Haven, Michigan:
Challenge Machinery Company, n.d.
- G. Operating Instructions for Electric Staplers.
Long Island City, New York: Swingline, Inc.,
n.d.
- H. Operating Instructions, GBC Combo. Northbrook,
Illinois: General Binding Corporation, n.d.
- I. Operating Instructions, Models 12DT and 16DT
Collators. Northbrook, Illinois: General
Binding Corporation, n.d.
- J. Service Manual, NSC DUO Combination Punch Bind
Machine. Hot Springs, Arkansas: NSC Inter-
national, Inc., n.d.

UNIT IX
SUPPLEMENTARY MACHINES

INFORMATION SHEET--COLLATOR

I. Terms and definitions

- A. Collate--method of putting pages of printed material in order
- B. Feeder fingers--mechanical projections that push the paper out of the collator bins
- C. Brass skids--protector feet located on the side of the feeder fingers inside the collator
- D. Paper tray--container which holds the collated material
- E. Set--a group or a series of collated papers
- F. Stacking tray--a container in which to place sets of paper as they are collated
- G. Fanning--method of putting air between sheets of paper

II. Introduction to the collator

- A. Collators are also called gathering machines
- B. The purpose of the machine is to help assemble separate sheets of paper
- C. The collator may contain from 8 to 20 bins. This means that from 8 to 20 sheets of paper may be assembled at one time.
- D. The collator contains rollers which force one sheet of paper at a time from a bin

III. Safety rules for operating the collator

- A. Be sure to disengage feed fingers in the bins (or trap) that will not be used
- B. Always fan and jog the paper before loading the machine
- C. Check the feed rollers to see that they are clean
- D. Do not overload machine

UNIT IX

SUPPLEMENTARY MACHINES

INFORMATION SHEET--PAPER CUTTER

- I. Terms and definitions
 - A. Safety lever--device that prevents the cutter blade from being used
 - B. Indicator--pointer
 - C. Scale--measure or rule
 - D. Backstop--metal bar which is used to position and straighten the paper at the indicator
 - E. Engage--the process of bringing together
- II. Purposes of paper cutter
 - A. To provide accurate cutting of paper
 - B. To accurately cut small pages from large sheets of paper
- III. Safety rules for operating the paper cutter
 - A. Only one person at a time should use a cutter
 - B. Before starting, make sure the cutter bed area is clear
 - C. Make sure the cutter blade is sharp
 - D. Lift cutter handle after each cut to engage safety latch
 - E. Keep one hand on the cutter handle and the other hand on the paper clamp while making a cut
- IV. Reading the cutting scale
 - A. The scale on the paper cutter is usually shown in inches
 - B. The scale shows the distance from the backstop to the line of cut
 - C. If the alignment in B is correct, the cut paper will be the same size as the measurement shown on the scale

UNIT IX

SUPPLEMENTARY MACHINES

INFORMATION SHEET--PAPER DRILL

I. Terms and definitions

- A. Paper drill bit--round, hollow metal device that puts a hole in paper
- B. Spindle--spinning shaft that holds the drill bit
- C. Handle--control lever that operates the drill bit
- D. Sharpener--grinding stone shaped like a pencil
- E. Drill block--round circle of wood, or paper drill table that is located beneath the drill bit
- F. Drill bit remover--steel rod with a flat side at one end
- G. Backstop--board across the feed table area that holds paper in right place
- H. Chipboard--cardboard used as the back of a paper pad
- I. Chuck--large end of the spindle which holds the bit

II. Purposes

- A. The paper drill is used to put holes in paper
- B. The holes made by the drill make it easy to place paper materials neatly in folders or looseleaf binders

III. Safety rules

- A. Keep hands away from tip of drill
- B. Keep hair tied back, away from face and machinery
- C. Know the machine before trying to operate it
- D. Keep work area around paper drill clean
- E. Examine drill bit often to see if it is clogged or plugged up

- F. Keep proper speed and pressure when operating machine, to reduce possibility of fire

IV. Operation of the paper drill

- A. Mark the materials in the proper area to be drilled
- B. Check drill bit to be sure it is not clogged
- C. Set backstop to proper depth
- D. Place paper under drill bit
- E. Turn paper drill switch to ON
- F. Pull handle down until guard around drill bit is holding the paper
- G. Hold paper in place with one hand and guide bit through stack of paper
- H. Turn paper drill switch to OFF

UNIT IX
SUPPLEMENTARY MACHINES

INFORMATION SHEET--SADDLEBACK STAPLER

I. Terms and definitions

- A. Staples--pre-formed u-shaped pieces of wire which are drawn through layers of paper to hold the paper together
- B. Saddle table--metal plate that can be used flat when stapling stacks of paper, or angled when stapling books
- C. Tension release--small knob at the rear of the loading rod which releases the spring action of the stapler
- D. Pusher rod--long piece of u-shaped metal which presses the staples to the proper place for use
- E. C-clamp--fastener used to hold a table top stapler
- F. Face plate--piece of protective metal at the front of the stapler
- G. Staple remover--device used to remove staples from material
- H. Handle--control lever on stapler

II. Safety rules when using the stapler

- A. Release tension knob before removing face plate
- B. Be sure stapler is clamped securely before you operate the machine
- C. Keep hands away from stapling area
- D. Remove defective staples with a staple remover only

III. Loading and unloading the stapler

- A. Release the tension knob slowly
- B. Remove the pusher rod completely

- C. Insert staples and push forward to the front of the stapler
- D. Replace the pusher rod
- E. Fasten the tension knob into the grooved area

(NOTE: These directions may not apply to all staplers. Be sure to read the instructions for your machine.)

IV. Clearing a staple jam

- A. Slowly turn the tension release knob
- B. Remove the face plate
- C. Clear the staple jam
- D. Replace the face plate
- E. Put the tension knob back in place

V. Positioning the saddle table

- A. When stapling stacks of paper, the saddle table should be flat
- B. When stapling a booklet or other folded material that is to be stapled on the crease, the saddle table should be angled

UNIT IX

SUPPLEMENTARY MACHINES

INFORMATION SHEET--PAPER FOLDER

I. Terms and definitions

- A. Upper fold plate--metal plate at top of machine
- B. Lower fold plate--metal plate found under paper tray
- C. Deflector--shield which keeps paper from going into lower plate
- D. Feed rollers--mechanism which moves paper on the folder
- E. Guide rails--metal guards used to guide paper out of the machine
- F. Guide rollers--mechanism which moves paper out of the machine
- G. Stacking spring--metal strips that hold paper as it is removed from folding machine

II. Learning about the paper folder

- A. As the paper is fed into the folder, it passes on to the upper fold plate. When the edge of the paper strikes the fold plate, the paper buckles at the point where the machine is set. A pair of fold rollers rotate toward each other and pull the folded paper through the machine.
- B. Some paper folders have a fold chart which gives the fold plate settings for standard folds. With other models, the fold plate settings may be determined by measuring the fold desired.
- C. If only one fold is to be made, only the upper fold plate is used. When the deflector level is moved to the ON position, the paper is blocked from entering the lower fold plate. If the deflector level is in the OFF position, the paper enters the lower fold plate for the second fold.

(NOTE: On some models, the fold plate must be turned around for the paper to be deflected.)

- D. The folding system must be adjusted to the thickness of the paper being folded. The adjusting knob is turned until a small gap appears between the feed roller and the separator roller.
- E. To check the feeding system place a folded sheet on the receiving tray tapes so that one edge is evenly touching the folding rollers. The stacking spring is put in the center of the paper so that the first stop is resting on the edge of the top sheet of paper.
- F. The two outside guides are put about one inch from the edges of the paper. The other paper guides should be evenly spaced across the sheet.

III. Safety rules

- A. Avoid getting hair into the folder rollers
- B. Make sure the machine is turned OFF before making any adjustments

UNIT IX

SUPPLEMENTARY MACHINES

INFORMATION SHEET--JOGGER AND PADDING PRESS

I. Terms and definitions

- A. Jogger--machine which puts sheets of paper in an even stack.
- B. Padding press--device which holds stacks of paper to be made into pads
- C. Padding cement--material which holds sheets of paper together at one edge.
- D. Chipboard--cardboard backing on pads
- E. Water soluble--substance that will dissolve in water
- F. Backboard--the part of the padding press which evens a stack of paper
- G. Pressure board--the part of the padding press that squeezes the sheets of paper together

II. Paper jogger features

- A. May consist of a small electric motor fastened to a wooden tag
- B. Has a motor shaft which is unbalanced with a weight
- C. May contain a speed control to handle different weights of paper

III. Safety rules

- A. Use care when handling paper because edges can cut
- B. Dry hands before using the jogger

IV. Using the jogger

- A. Paper to be jogged must be placed into the jogger before the machine is turned ON
- B. Paper is placed into the jogger in either direction

- C. Operate the jogger for a few seconds until all of the paper is straight

V. Purposes of the padding press

- A. To combine loose sheets of paper
- B. To hold sheets of paper to be made into a pad

VI. Safety rules when using the padding press

- A. Be careful when handling paper; paper edges can cut
- B. Be careful when cutting the pads apart with a knife

VII. Parts of a padding press

- A. Clamping device
- B. Padding cement
- C. Padding cement brush

VIII. Using the padding presse

- A. After jogging the paper, desired number of sheets are placed in sets, with a piece of chipboard between each set, in the padding press.
- B. The sets are pushed evenly against the back-board
- C. Pressure board is clamped firmly so pads will not slip
- D. Padding cement is applied with a brush by either:
 - 1. Turning the sheets and pressure board around, or
 - 2. Removing the backboard
- E. The pads are cemented from the rear
 - 1. The cement is applied with a brush
 - 2. Usually, two coats of padding cement are needed
- F. When cement is dry, cut pads apart with a knife

UNIT IX
SUPPLEMENTARY MACHINES

INFORMATION SHEET--PUNCH AND BINDER

- I. Terms and definitions
 - A. Align--to line up; placing two or more materials in position
 - B. Extend--to spread out
 - C. Neutral--not in operating position
 - D. Paper side guide--device which stops the paper at proper place
 - E. Push-pull pins--steel levers which control operation of punching dies (metal cutters)
 - F. Binder--Device used to attach pages of material together (may be metal or plastic)
 - G. Binding stop--control level that adjusts binding spread
 - H. Cover set--front and back covers to be punched and placed with printed material
- II. Purposes of punch and binder
 - A. To bind loose sheets of paper together
 - B. To make it easy to add and take out pages
- III. Safety rules when using a punch and binder
 - A. Be careful when handling plastic binders; the edges are sharp
 - B. Be careful when handling paper because the edges are sharp
- IV. Procedures for using punch and binder
 - A. Adjusting margins
 1. Paper is placed into the machine as far as it will go

2. The left margin is set so that the punching pattern is evenly placed from one side of the paper to the other
3. The push-pull pins are raised where holes are unnecessary

B. Punching one sheet

1. Pull the machine handle with a quick, forward stroke
2. Remove paper and fold it in half to check if the edges are even. If uneven, align another sheet of paper, adjust margins, and repeat the test until margins are even

C. Punching book

1. Papers are jogged on side to be punched
2. With the handle in the neutral position, put the papers into the machine in lifts of 12-17 sheets. The sheets are placed against the backstop and to the left of the paper guide
3. Pull the handle with a quick, forward stroke
4. Remove the punched sheets from the machine and place print side down beside machine
5. Punch the remaining sheets of paper in the same way
(NOTE: If several books are to be punched, stack books cross-cross to separate)

D. Binding book

1. Choose a binder according to the thickness of the book. The right size for a binder is one that is about one-eighth inch larger than the thickness of the book (including covers)
2. Place the binding behind the holding fingers, with a binding circle between each holding finger and the opening of the binding
3. Set binding control at the proper spread
4. Push the handle back to open the binding

5. Place the front cover face down on the binding fingers, with each opening going into a separate binding finger
6. Place lifts of punched paper face down for binding, with pages in consecutive order
7. Place the back cover last
8. Pull the handle forward to the neutral position to release the binding
9. Lift the bound book off the binder
10. Check the book to be sure all pages are print-side up

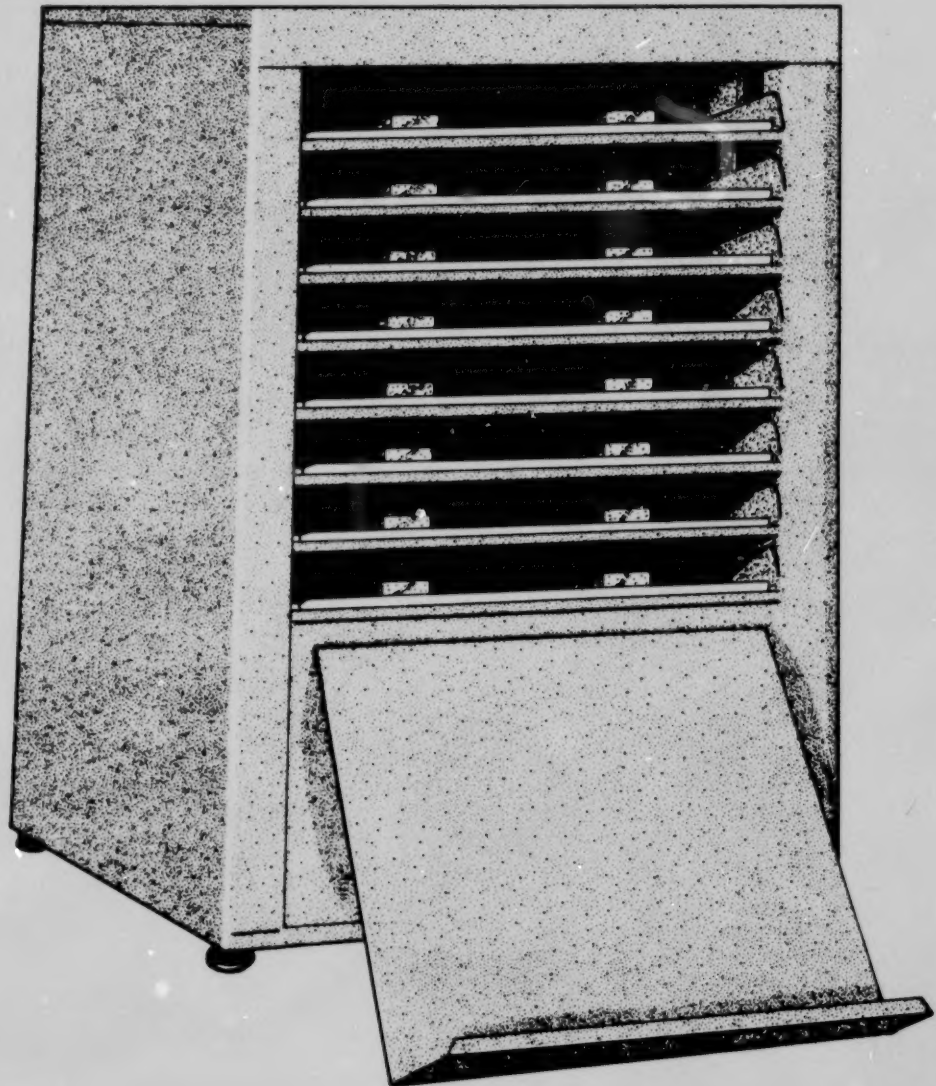
E. Punching coversets

1. Coversets are usually larger than the paper sheets. The punching pattern starts one-eighth inch from the top and bottom edge of the cover
2. First, place a scrap coverset in the machine, then center and push to the backstop
3. Adjust the left paper guide for the left edge of the paper
4. Where noles are not needed, the push-pull pins are deactivated
5. Pull the handle forward quickly
6. After coverset is punched, fold it in half with top and bottom edges touching, to check if the margins are even. If not, the paper guide is reset, and another scrap coverset is used to even the margins.
7. Once the margins are even, all coversets are punched on the edge

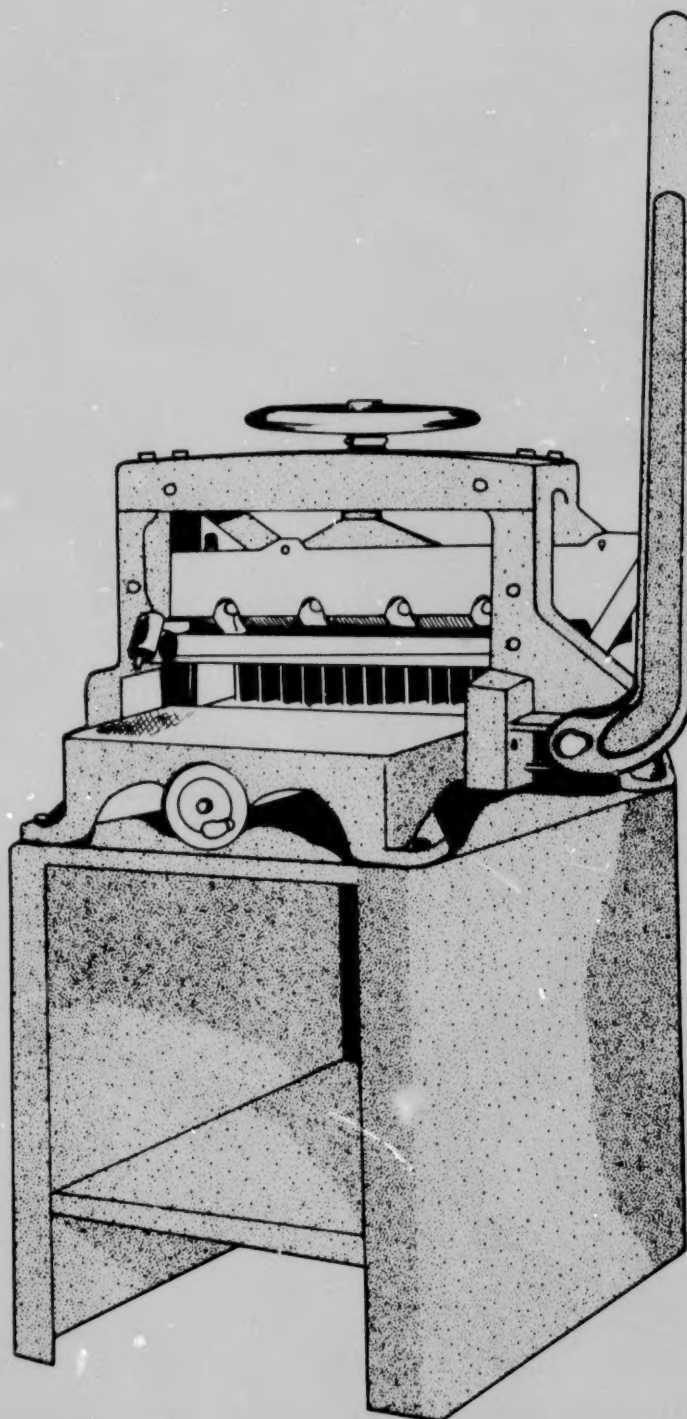
V. Emptying the paper chip tray

- A. If machine punches with difficulty, paper punchings have probably filled the paper chip tray, causing a jam

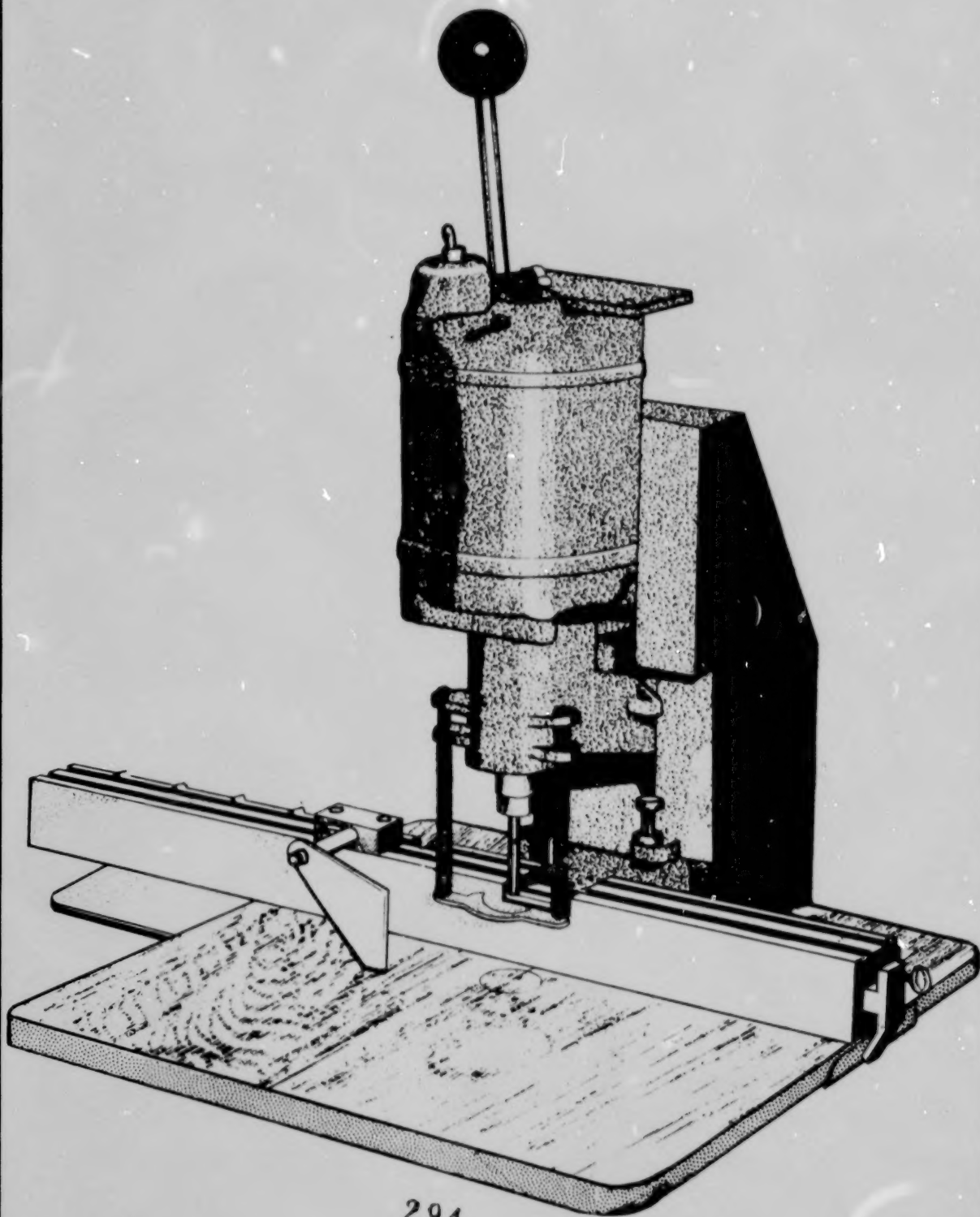
PAPER COLLATOR



PAPER CUTTER



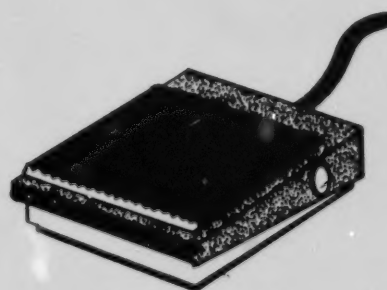
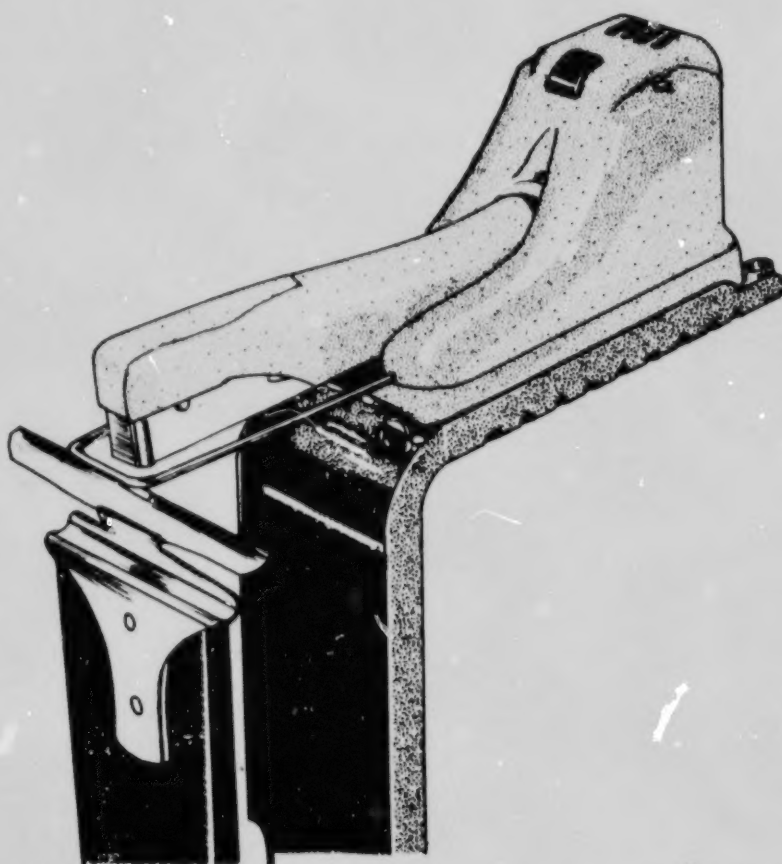
PAPER DRILL



294

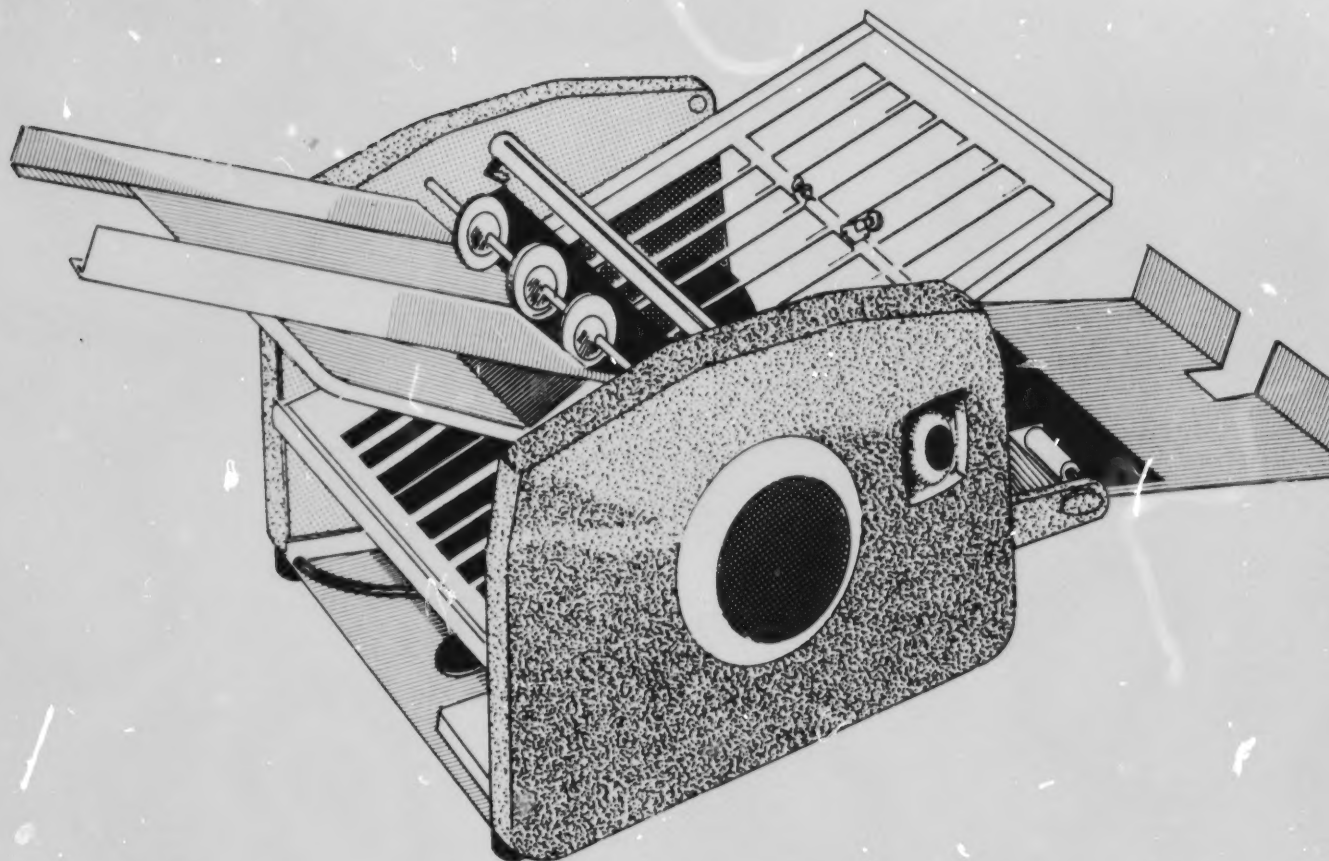
TM-3

SADDLE BACK STAPLER



FOOT PEDAL

FOLDING MACHINE



HOW TO INSERT UPPER FOLD PLATE

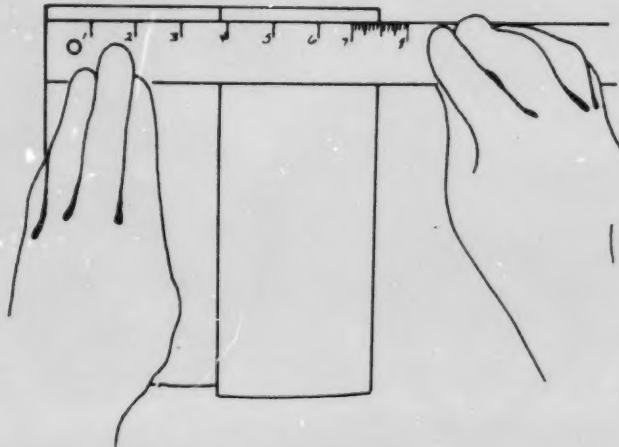


HOW TO INSERT LOWER FOLD PLATE

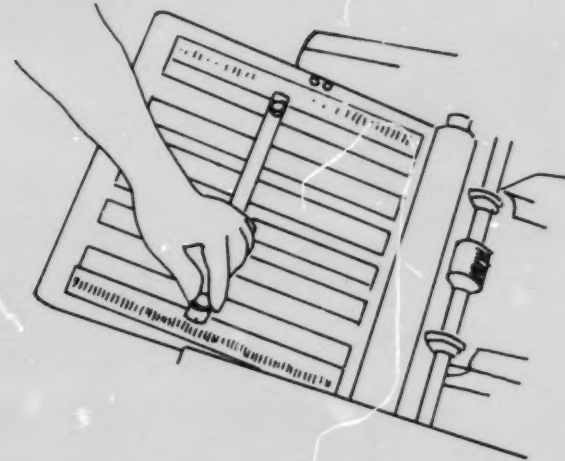


SETTING UPPER AND LOWER FOLD PLATE

STEP 1

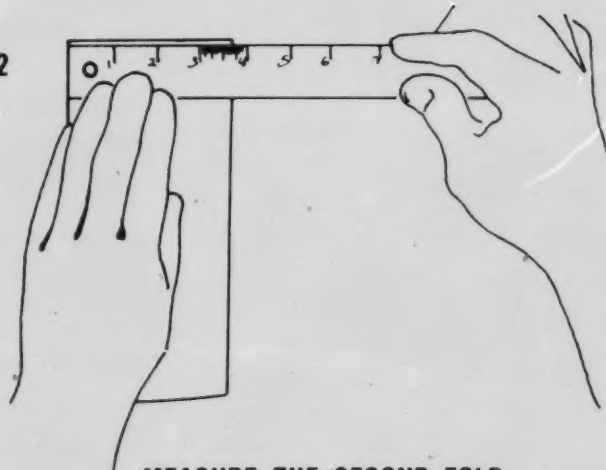


MEASURE THE FIRST FOLD

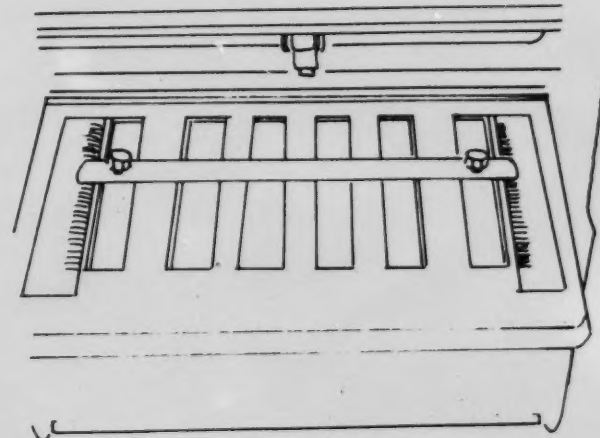


SET THE UPPER FOLD PLATE

STEP 2



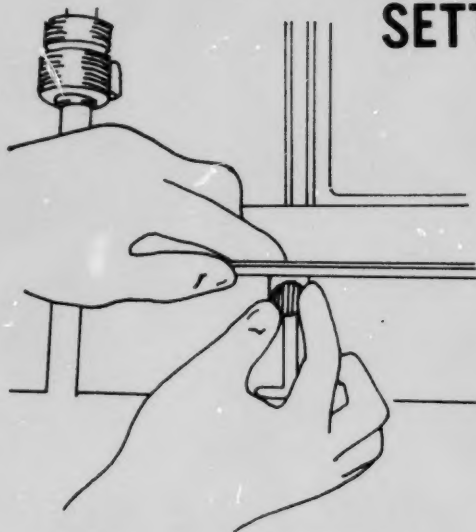
MEASURE THE SECOND FOLD



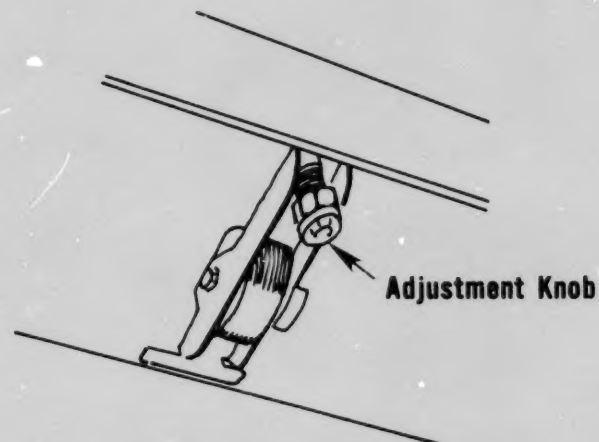
SET THE LOWER FOLD PLATE

TM-7

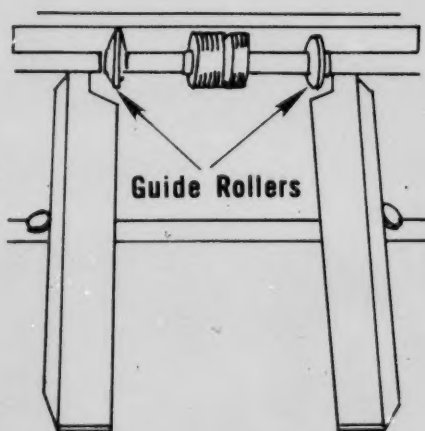
SETTING ADJUSTMENTS ON THE FOLDER



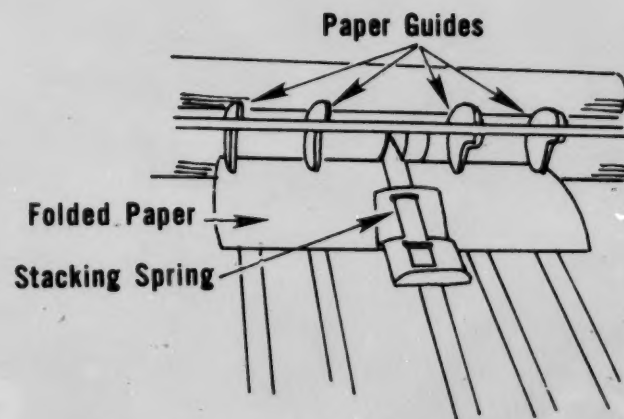
SET THE LEFT SIDE GUIDE RAIL



ADJUST THE FEEDING SYSTEM



POSITION THE GUIDE ROLLERS

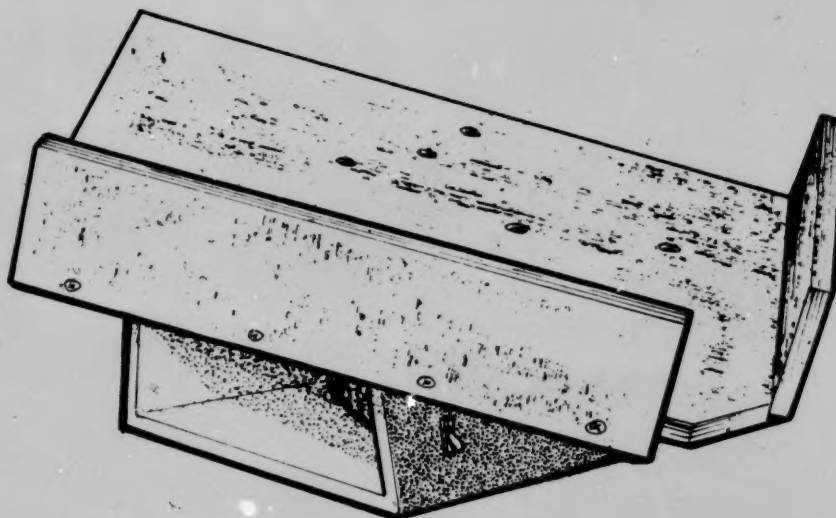


POSITION THE STACKING SPRING AND PAPER GUIDES

JOGGER



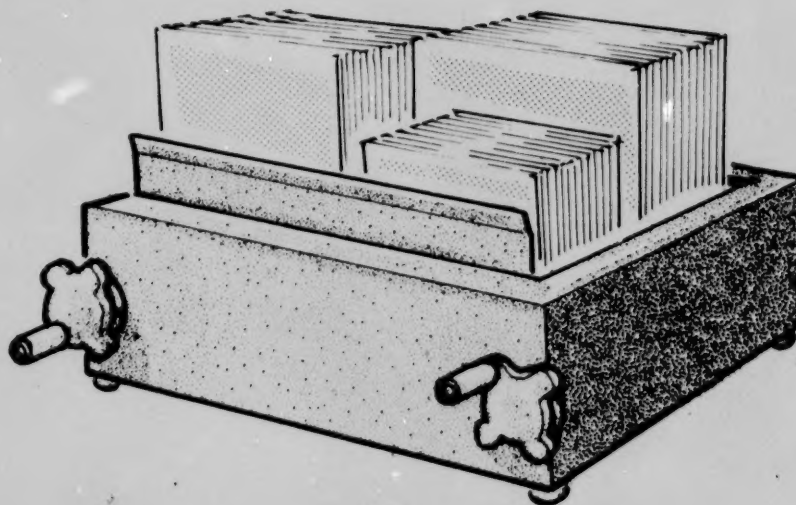
FLAT TOP



TILT TYPE

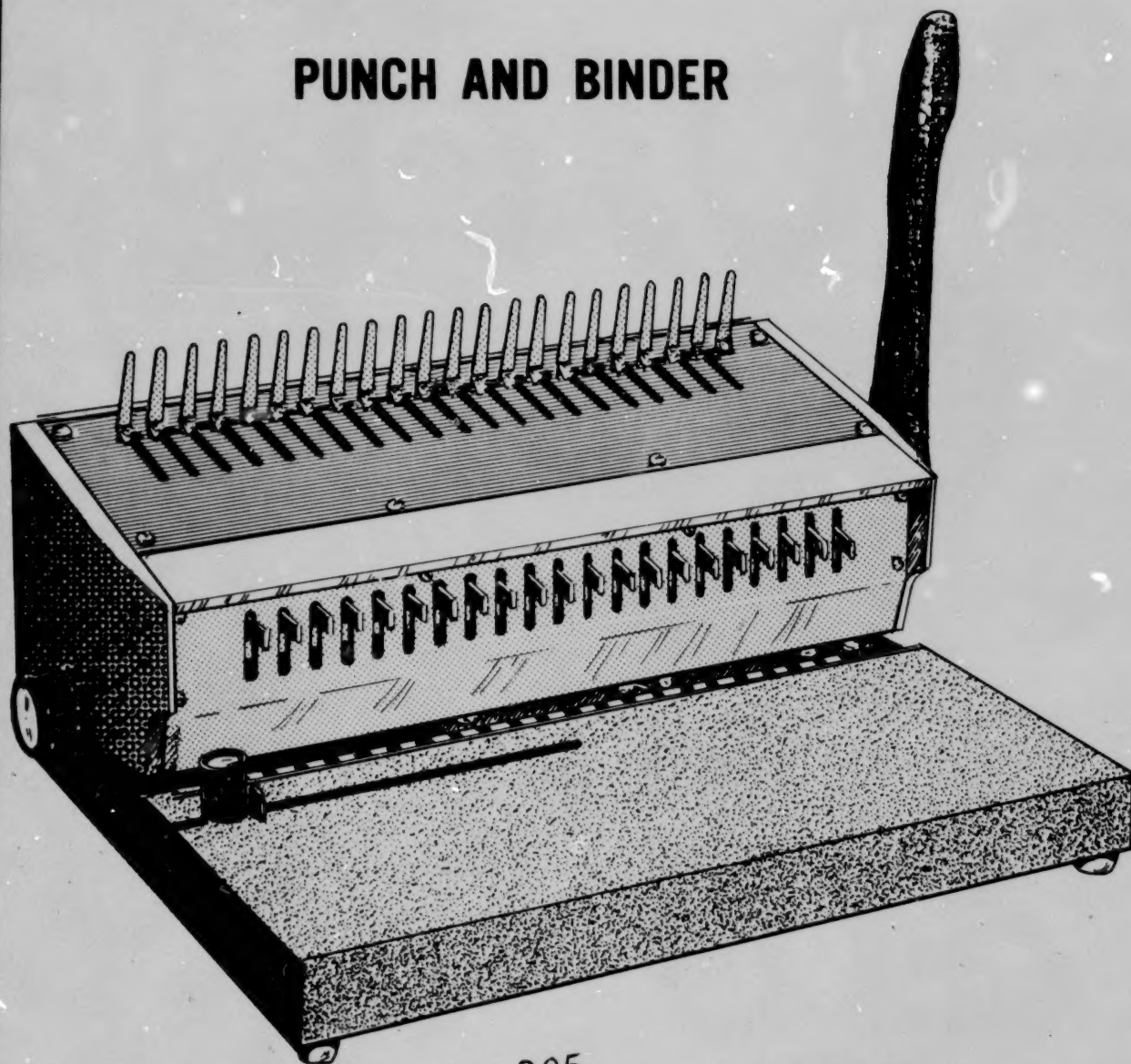
303

PADDING PRESS



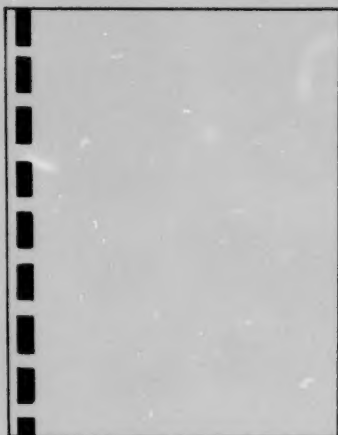
304

PUNCH AND BINDER



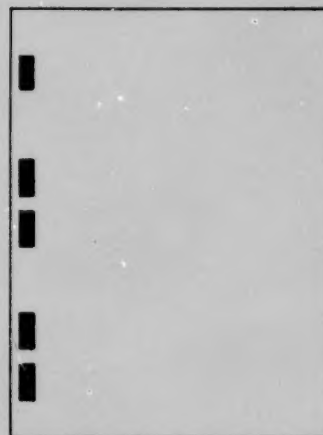
305

CORRECT AND INCORRECT PUNCHES



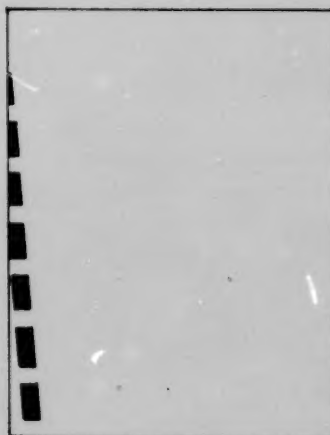
EDGES PUNCHED

(Push-pull pin not de-activated on edge of paper)



IMPROPER PINS DE-ACTIVATED

(leaves spaces not punched)



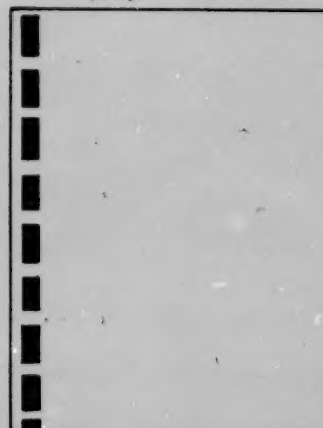
CROOKED PUNCH

CORRECT PUNCH



INCORRECT MARGINS

(Top & Bottom)



UNIT IX
SUPPLEMENTARY MACHINES

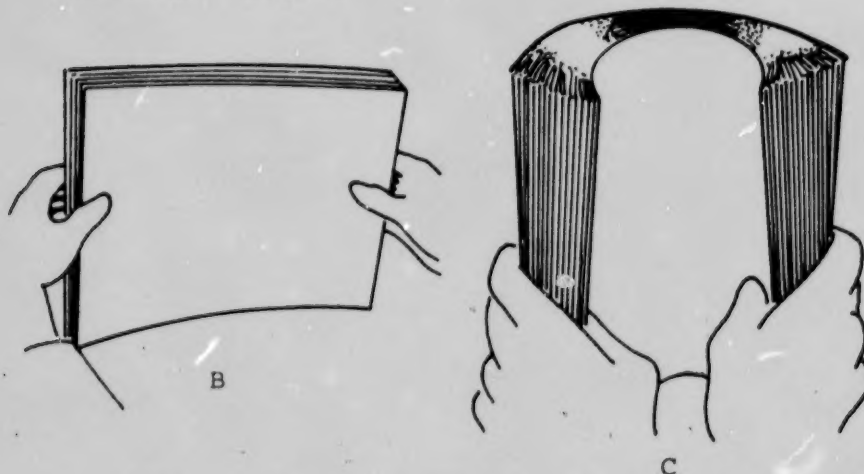
JOB SHEET #1--FAN AND JOG PAPER

I. Tools, materials, and equipment:

- A. Stack of paper
- B. Flat, level table

II. Procedures:

- A. Put stack of paper on the flat surface
- B. Using both hands, grasp the paper between thumbs and other fingers



- C. Bend the stack of paper with the ends about two inches apart
(NOTE: Do not use any thumb pressure when bending the paper)
- D. Keeping firm pressure between the thumb and fingers on the edges of the stack, reduce the bend until the stack of paper straightens out
- E. Release finger pressure on edges of the paper and guide the paper into a neatly jogged stack
- F. Repeat the above procedures two or three times for each stack of paper

UNIT IX

SUPPLEMENTARY MACHINES

JOB SHEET #2--LOAD AND OPERATE THE COLLATOR

I. Materials and equipment required:

- A. Electric collator
- B. Paper to be assembled
- C. Table

II. Procedures:

(NOTE: The following procedures are general. Follow specific instructions contained in the operator's manual for the particular machine in use)

- A. Carry paper to table beside collator
- B. Plug in the machine
- C. Turn the switch to ON until feed fingers are in the forward position; then turn the switch to OFF
- D. Lift feeder fingers upward until magnet catches fingers and holds them in place
- E. Fan and jog each stack of paper pages
- F. Place the stack of page one in bin (tray) #1, and continue with pages 2, 3, etc., until all the bins (trays) are filled
(NOTE: Do not overload a tray)
- G. Adjust paper in each bin
- H. Turn the ON switch until paper is fed out; immediately turn switch to OFF position
- I. Check to see if all pages are feeding properly; if not, notify the instructor
- J. Grasp the pages with a "scissor-like" motion and place the sets of pages criss-cross in the stacking tray
- K. Continue gathering sheets until one of the trays is empty

- L. Turn machine switch to OFF
- M. Remove extra sheets from tray
- N. Clean up area

UNIT IX
SUPPLEMENTARY MACHINES

JOB SHEET #3--OPERATE PAPER CUTTER

I. Materials and equipment:

- A. Stack of paper
- B. Paper size measurements
- C. Paper cutter

II. Procedures:

(NOTE: The following procedures are general. Follow specific instructions contained in the operator's manual for the machine to be used)

- A. Check safety lever to be sure it is engaged
- B. Set indicator on scale for required number
- C. Jog stack of paper
- D. Place paper on paper cutter with edge to be cut nearest the blade. Place paper edge not to be cut against backstop so that the paper rests evenly
- E. Engage paper clamp to hold paper securely
- F. Release safety catch
- G. Pull handle down to cut paper
- H. Bring handle up far enough to engage safety catch
- I. Release paper clamp
- J. Remove paper from paper cutter
- K. Clean up area

UNIT IX
SUPPLEMENTARY MACHINES

JOB SHEET #4--OPERATE PAPER DRILL

I. Materials and equipment:

- A. Paper drill
- B. Drill bit remover
- C. Stack of paper to be drilled for 3-ring binder
- D. Measuring device
- E. Paper marker

II. Procedures:

(NOTE: These procedures are general. Follow specific instructions contained in operator's manual for particular model in use)

- A. Measure and mark the paper as requested
- B. Check drill bit to be sure it is not clogged
- C. Set the backstop at the requested depth
- D. Place one of the marked areas to be drilled under the drill bit
- E. Pull the handle down until the drill bit guard is resting on the paper
- F. Turn the machine switch to ON
- G. Hold paper in place with one hand, and with the other hand guide the bit down through the marked area of the paper
- H. Repeat steps D-G until the job is completed
- I. Clean up work area
- J. Make sure paper drill is turned OFF before leaving work area

UNIT IX
SUPPLEMENTARY MACHINES

JOB SHEET #5--SECURING A SADDLEBACK STAPLER ON TABLE TOP

I. Materials and equipment:

- A. Level table with an wide edge
- B. Saddleback stapler
- C. C-clamp

II. Procedures:

(NOTE: The following procedures are general. Follow specific instructions contained in the operator's manual for the particular model in use)

- A. Set stapler on table
- B. Hold stapler firmly with one hand
- C. Fasten stapler to table with other hand using the C-clamp
- D. Test to make sure the stapler is tightly fastened to the table.

UNIT IX

SUPPLEMENTARY MATERIALS

JOB SHEET #6: LOAD THE SADDLEBACK STAPLER

I. Materials and equipment:

- A. Saddleback stapler
- B. Staples

II. Procedures

(NOTE: These procedures are general. Follow specific instructions contained in operator's manual for particular model in use)

- A. Release the tension knob
- B. Remove pusher rod from stapler
- C. Place staples in machine, pushing them to front of stapler
- D. Replace pusher rod
- E. Slowly push tension knob and fasten it in groove

UNIT IX

SUPPLEMENTARY MACHINES

JOB SHEET #7--CLEAR A STAPLE JAM

I. Materials and equipment:

- A. Saddleback stapler
- B. Extra staples

II. Procedures:

(NOTE: These procedures are general. Follow detailed instructions contained in operator's manual for particular model in use)

- A. Release tension knob
- B. Remove face plate by removing fastener
- C. Remove jammed staples
- D. Replace face plate
- E. Secure tension-release knob

UNIT IX
SUPPLEMENTARY MACHINES

JOB SHEET #8--STAPLE BOOKLETS

I. Materials and equipment:

- A. Saddleback stapler
- B. Work order for a booklet, or stacks of paper that can be used as a booklet
- C. Staples
- D. Staple remover

II. Procedures:

(NOTE: These procedures are general. Follow detailed instructions contained in operator's manual for particular model in use)

- A. Be sure stapler is loaded
- B. Angle saddle table
- C. Place material to be stapled across the saddle table under the stapling mechanism
- D. Hold the paper with one hand, keeping fingers away from direct contact with the staples
- E. Using the free hand, slowly depress stapler handle
- F. Check to see if the staple has been correctly placed; if not, remove the incorrect staple with a staple remover, and then staple again
- G. When all stacks are stapled into booklet form, clean any dropped staples from floor or table top

UNIT IX
SUPPLEMENTARY MACHINES

JOB SHEET #9--STAPLE FLAT STACKS OF PAPER

I. Materials and equipment:

- A. Saddleback stapler
- B. Stack of papers
- C. Staple remover
- D. Staples

II. Procedures

(NOTE: These procedures are general. Follow specific instructions contained in operator's manual for particular model in use)

- A. Check to see if stapler is loaded
- B. Be sure the saddle table is flat
- C. Place paper to be stapled on the saddle table under the stapling mechanism
- D. Hold the paper with one hand, keeping fingers away from direct contact with the staples
- E. Using the free hand, slowly depress the stapler handle
- F. Check to see if the staple has fastened the paper correctly; if not, remove the staple with the staple remover, and then staple again
- G. Repeat C through E until job is completed
- H. Clean any dropped staples from floor and table top

UNIT IX
SUPPLEMENTARY MACHINES

JOB SHEET #10--OPERATE THE PAPER FOLDER

I. Materials and equipment:

- A. Paper folder
- B. Printing order, to be folded in half

II. Procedures:

(NOTE: These procedures are general. Follow specific instructions contained in operator's manual for particular model in use)

- A. Set the upper fold plate
- B. Set the lower fold plate
- C. Adjust the deflector for a single fold
- D. Set guide rails for the width of the paper
- E. Position the guide rollers
- F. Adjust for the thickness of the paper
- G. Turn the paper folder on and check machine, using only one sheet of paper
- H. Position stacking spring so the first edge is resting on folded paper
- I. Position paper guides one unit from edges of paper
- J. Jog and fan the paper so each top sheet will feed into folder first
- K. Feed paper into machine
- L. After job is completed, throw away crumpled or wrinkled copies
- M. Place folded copies in a neat stack
- N. Replace machine cover
- O. Clean up work area

UNIT IX

SUPPLEMENTARY MACHINES

JOB SHEET #11--OPERATE THE PAPER JOGGER

I. Materials and equipment:

- A. Jogger
- B. Scrap paper that can be used for pads

II. Procedures:

(NOTE: These procedures are general. Follow specific instructions contained in operator's manual for particular model in use)

- A. Assemble paper
- B. Put paper into jogger
- C. Hold the paper steady with one hand
- D. With the other hand, turn the jogger ON
- E. Let the machine operate for a few seconds until all edges of the paper are even
- F. Turn machine OFF
- G. Clean up work area

UNIT IX

SUPPLEMENTARY MACHINES

JOB SHEET #12--OPERATE THE PADDING PRESS

I. Materials and equipment:

- A. Jogged paper
- B. Padding press
- C. Padding cement
- D. Brush
- E. Regular knife
- F. Sharp knife (e.g., X-Acto)
- G. Chipboard

II. Procedures:

(NOTE: These procedures are general. Follow specific instructional contained in operator's manual for particular model in use)

- A. Put jogged paper next to padding press
- B. Lay paper on padding press, pushing papers evenly to the backboard
- C. Count the number of sheets of paper to be used in each pad
- D. Place a piece of chipboard on top of each section of paper
- E. When the paper and chipboard are in place, put on pressure board
- F. Slightly secure side chains with the clamps, one at a time
- G. Depending on model available, turn sheets and pressure board around to front side, or just remove backboard
- H. Using a knife (e.g., X-Acto), lightly cut across the edges of the paper

- I. Dip brush lightly into cement
- J. Apply cement, starting at the center of paper stack, and brush toward the paper edges
- K. While waiting for cement on pads to dry,
 - 1. Tightly cap padding cement
 - 2. Clean brush with water
 - 3. Clean up any scrap paper or cement spills
- L. When cement is completely dry, separate pads with knife

UNIT IX

SUPPLEMENTARY MACHINES

JOB SHEET #13--PUNCH AND BIND A BOOK

I. Materials and equipment:

- A. Bindings
- B. Paper to be punched and bound (scrap paper)
- C. Scrap cover stock
- D. Coversets

II. Procedures:

(NOTE: These procedures are general. Follow specific instructions within operator's manual for particular model in use)

A. Punching holes in book

1. Assemble 25 sheets of scrap paper
2. Number pages in upper right corner 1 through 25
(NOTE: Mark through any numbers already on pages)
3. Select two scrap covers. Label one cover Front and the other Back
4. Select binder to fit pages and covers
5. Have several extra scraps of paper and scrap coverstock to use when setting punching pattern
6. Insert extra paper scrap, centered against backstop, into machine
7. Place left paper guide so that punching pattern is evenly spaced from one edge of paper to the other
8. Raise push-pull pins where holes are unnecessary
9. Pull handle forward quickly to punch holes in paper

10. Raise handle to NEUTRAL position
11. Remove paper and fold top and bottom edges together to check if margins are even. If not, repeat steps #6-#10 until margins are even
12. Punch holes in numbered scrap paper, beginning with page no. 1 with print side up
13. Place handle in NEUTRAL position, remove lift of paper, and place lift print-side down beside machine after punching, keeping pages in consecutive order

B. Punching coverset

1. Using extra scrap cover, place cover into machine until side rests against backstop
2. Center the coverstock so edges are even
3. Adjust left paper guide against left side of cover
4. Raise push-pull pins where holes are not needed
5. Pull handle forward quickly to punch holes
6. Place handle in NEUTRAL position and remove cover
7. Fold cover in half, with top and bottom edges touching, to check for even margins. If margins are not even, repeat steps #1-#6 until margins are even
8. Punch both covers on the requested edge
9. Place handle in NEUTRAL position and remove covers

C. Binding book

1. With the handle in NEUTRAL position, place the binding behind the holding fingers with a binding circle between each holding finger and the opening of the binding facing up
2. Push handle back to open binding
3. Place scrap cover marked FRONT face down on binding fingers with each opening into separate

binding fingers

4. Place lifts of numbered papers face down, beginning with page 1, on binding fingers, keeping pages in order
5. Place back cover face down on binding
6. Pull handle forward to NEUTRAL position to release binding
7. Remove bound book from binder and check through book to see if pages are in order and print side is facing down
8. Clean work area and store supplies

UNIT IX

SUPPLEMENTARY MACHINES

UNIT TEST--COLLATOR

1. Match terms on the left with the correct definitions.

- | | |
|-------------------------|---|
| _____ a. brass skids | 1. container which holds collated material |
| _____ b. feeder fingers | 2. a group or series of collated papers |
| _____ c. collate | 3. receptacle that holds sets of paper as they are collated |
| _____ d. fanning | 4. protector feet located inside the collator |
| _____ e. paper tray | 5. method of putting air between sheets of paper |
| _____ f. set | 6. projections that push the paper out of the collator bins |
| _____ g. stacking tray | 7. method of putting pages of printed material in order |

2. Identify true statements about the collator by placing a "✓" in the space next to the correct statements.

- _____ a. Collators are also called joggers.
- _____ b. The purpose of the collator is to assemble separate sheets of paper.
- _____ c. A collator may have up to 150 bins.
- _____ d. A collator usually contains rollers that force separate sheets of paper out of bins.

3. List at least three safety rules to observe when using the collator:

- a. _____
- b. _____
- c. _____

UNIT IX

SUPPLEMENTARY MACHINES

UNIT TEST--PAPER CUTTER

1. Match the terms on the left with the correct definitions.

- | | |
|-----------------------|---|
| _____ a. safety lever | 1. pointer |
| _____ b. indicator | 2. the process of bringing together |
| _____ c. scale | 3. measure or rule |
| _____ d. backstop | 4. metal bar used to position and strengthen paper |
| _____ e. engage | 5. device which prevents cutter blade from being used |

2. Write the purposes of the paper cutter.

3. Place a "✓" beside those statements that are correct safety rules to be followed when using the paper cutter.

- _____ a. Two people can operate a paper cutter easier than one person.
- _____ b. The paper cutter bed must be clean before the paper cutter is used.
- _____ c. A dull cutter blade is better than a sharp cutter blade and less likely to cause serious injuries.
- _____ d. The safety latch is engaged after each cut.
- _____ e. Both hands are placed on the paper cutter when making a cut.

UNIT IX
SUPPLEMENTARY MACHINES

UNIT TEST--PAPER DRILL

1. Match the terms on the left with the correct definitions.

- | | |
|----------------------------|---|
| _____ a. paper drill bit | 1. large end of the spindle which holds the bit |
| _____ b. spindle | 2. spinning shaft that holds the drill bit |
| _____ c. handle | 3. steel rod with a flat side on one end |
| _____ d. sharpener | 4. cardboard used as a back on a paper pad |
| _____ e. wooden block | 5. board across feed table area that holds paper in place |
| _____ f. drill bit remover | 6. Grinding stone that is shaped like a pencil |
| _____ g. backstop | 7. control lever that operates drilling of paper |
| _____ h. chipboard | 8. round circle of wood beneath the drill bit |
| _____ i. chuck | 9. hollow metal device that puts a hole in paper |

2. Place a "✓" beside the purposes of the paper drill.

- _____ a. It is used to put holes in large amounts of paper.
- _____ b. The holes made by the drill make it easy to place paper materials neatly into folders and binders.
- _____ c. It jogs paper for use in making paper pads.

3. Circle the best word(s) to complete the following statements on safety rules to be observed when using the paper drill.

- a. Keep (hands, paper) away from the top of the drill.
- b. Keep (glasses, hair) tied back away from face and

paper drill.

- c. Keep work area around paper drill (clean, dirty).
- d. Examine drill bit frequently to see if it is (clogged, sharp).
- e. Maintain proper speed and (distance, pressure) when operating machine to reduce possibility of fire.

4. Place the steps in operating the paper drill in their proper sequence by placing #1-#8 in consecutive order within the space provided.

- _____ a. Place paper under drill bit.
- _____ b. Check drill bit to be sure it is not clogged.
- _____ c. Turn paper drill switch to OFF.
- _____ d. Set backstop to proper depth.
- _____ e. Pull handle down until drill bit guard is holding the paper.
- _____ f. Hold paper in place with one hand and guide bit through stack of paper.
- _____ g. Hold paper drill switch to ON.
- _____ h. Mark materials in the paper area to be drilled.

UNIT IX
SUPPLEMENTARY MACHINES

UNIT TEST--SADDLEBACK STAPLER

1. Circle the correct word(s) in each of the following statements:
 - a. Pre-formed pieces of wire which are driven through layers of paper are called (nails, staples).
 - b. (Saddle table, Receiving tray) is a metal plate which can be used flat to staple stacks of paper or angled to staple booklets.
 - c. A small knob at the rear of the loading rod which releases the spring action of the stapler is called the (trigger, tension release).
 - d. (Pusher rod, Pressure clamp) is a long piece of u-shaped metal which presses the staples to the front.
 - e. A fastener used to secure a table-top stapler is a (c-clamp, u-clamp).
 - f. A piece of protective metal called the (face plate, projection plate) is located at the front of the stapler.
 - g. A device used to take out staples from material is a (staple remover, pusher rod).
 - h. The (handle, button) is the control lever on the stapler.
2. List four safety rules when using the stapler:
 - a. _____
 - b. _____
 - c. _____
 - d. _____

3. Place the steps involved in loading and unloading the stapler in their proper order by placing #1-#5 in consecutive order.

- _____ a. Remove the pusher rod.
- _____ b. Fasten the tension knob.
- _____ c. Insert staples and push forward to front of stapler.
- _____ d. Replace pusher rod.
- _____ e. Release the tension knob slowly.

4. Describe the procedures in clearing a staple jam.

5. Place a "✓" next to those statements that are true when positioning a saddle table.

- _____ a. When stapling stacks of paper, the saddle table is flat.
- _____ b. For lengthy stacks of paper the saddle table should be angled.
- _____ c. When stapling material to be folded and stapled in the middle, the saddle table is removed.

UNIT IX

SUPPLEMENTARY MACHINES

UNIT TEST--PAPER FOLDER

1. Match the terms on the left with the correct definitions.

- | | |
|---------------------------|---|
| _____ a. upper fold plate | 1. metal strips that hold paper as it is removed from folding machine |
| _____ b. lower plate | |
| _____ c. deflector | 2. metal plate under paper tray |
| _____ d. feed rollers | 3. mechanism which moves paper out of machine |
| _____ e. guide rails | |
| _____ f. guide rollers | 4. metal guards used to guide paper into the machine |
| _____ g. stacking spring | 5. metal plate at top of machine |
| | 6. shield which prevents paper from going into lower plate |
| | 7. mechanism which moves paper on the folder |

2. Place a "✓" beside those statements which are true concerning the paper folder.

- _____ a. As paper is fed into the paper folder, the edge of the paper strikes a fold plate, which causes the paper to buckle and fold.
- _____ b. Some paper folders are equipped with a fold chart.
- _____ c. When only one fold is being made, the lower fold plate is not used.
- _____ d. The folding system must be adjusted to the thickness of the paper being folded.
- _____ e. The feeding system is never checked for accuracy.
- _____ f. The two outside guides are positioned about three inches from the edge of the paper.

3. List two safety rules to observe when using the paper folder:

- a. _____
- b. _____

UNIT IX

SUPPLEMENTARY MACHINES

UNIT TEST--JOGGER AND PADDING PRESS

1. Circle the correct word(s) in each of the following statements:
 - a. A machine which straightens stacks of paper is a (paper drill, jogger).
 - b. A padding press changes stacks of papers into (binders, pads).
 - c. Material which holds sheets of paper together is (staple remover, padding cement).
 - d. Cardboard backing or paper pads consist of (particle board, chipboard).
 - e. (Water soluble, Mixable) refers to a substance having the ability to dissolve in water.
 - f. The part of the padding press which evens a stack of paper is the (receiving tray, backboard).
 - g. The part of the padding press which squeezes the sheets together is the (squeezer, pressure board).
2. List three features of the paper jogger:
 - a. _____
 - b. _____
 - c. _____
3. Place a "✓" beside safety rules to be followed when using the jogger.
 - _____ a. Slide fingers across paper edges to check paper cut.
 - _____ b. Wipe hands dry before using jogger.
 - _____ c. Allow jogger to run a few minutes before throwing paper into jogger.

4. Identify true statements on using the jogger by placing a "✓" next to the statements.

- _____ a. Paper to be jogged must be placed into the jogger before the machine is turned ON.
- _____ b. Wipe hands dry before using jogger.
- _____ c. Allow jogger to run a few minutes before throwing paper into jogger.

5. List the two purposes of the padding press:

- a. _____
- b. _____

6. List the parts of the padding press:

- a. _____
- b. _____
- c. _____

7. Put the steps in using the padding press in their proper order by placing #1-#6 in the space provided.

- _____ a. The sets are pushed evenly against the backboard.
- _____ b. Pressure board is clamped firmly so pads will not slip.
- _____ c. The pads are cemented from the rear.
- _____ d. Paper is placed in sets with a piece of chipboard in between each set.
- _____ e. Each pad is cut apart with a knife.
- _____ f. The cement is applied by either turning the sheets and pressure board around, or removing the backboard.

UNIT

SUPPLEMENTARY MACHINES

UNIT TEST--PUNCH AND BINDER

1. Match the terms on the left with the correct definitions.

- | | |
|---------------------------|---|
| _____ a. align | 1. being straight up and down |
| _____ b. diameter | 2. device which stops the paper at proper place |
| _____ c. rectangular | 3. front and back covers to be punched and placed with printed material |
| _____ d. extend | 4. control lever that adjusts binding spread |
| _____ e. neutral | 5. to spread out |
| _____ f. vertical | 6. the length of a straight line through the center of a figure |
| _____ g. paper side guide | 7. to line up; the process of placing two or more materials in correct position |
| _____ h. push-pull pins | 8. device used to attach pages of materials together |
| _____ i. binder | 9. a figure having parallel sides which are all right angles |
| _____ j. binding stop | 10. being disengaged |
| _____ k. coverset | 11. steel levers which control operation of punching dies |

2. List the two purposes of the punch and binder:

- a. _____
- b. _____

3. Place a "✓" beside the correct safety rules to observe when using punch and binder.
- _____ a. Use care when handling plastic binders.
 - _____ b. Run fingers over paper edge to check paper cut.
 - _____ c. Place fingers next to punching dies to guide them through paper.
4. Identify procedures when using a punch and binder by:
- a. Placing a "✓" beside the correct procedures in adjusting margins.
- _____ (1) Paper is placed into the machine with the edge just inside the machine.
 - _____ (2) The left margin is never set; it always stays the same.
 - _____ (3) The push-pull pins are deactivated where holes are unnecessary.
 - _____ (4) It is a good idea to center the paper in the machine.
- b. Sequencing the steps in punching one sheet by using the letters (a) - (d) in consecutive order.
- _____ (1) Remove paper and fold it in half.
 - _____ (2) If edges are uneven, align another sheet of paper.
 - _____ (3) Pull the machine handle with a quick, forward stroke.
 - _____ (4) Check the paper edges for evenness.
- c. Identifying true statements on punching a book by placing a "✓" next to the correct statements.
- _____ (1) Papers are jogged on the opposite side to be punched.
 - _____ (2) The handle is in the NEUTRAL position when the paper is inserted into the machine.
 - _____ (3) The sheets are placed against the backstop and to the right of the paper guide.

- _____ (4) Pull the handle in a quick, forward motion.
- _____ (5) Remove the punched sheets from the machine and place print side up.
- d. Sequencing the steps in binding a book by using letters (a) - (j) in alphabetic order.
 - _____ (1) Choose a binder according to the thickness of the book.
 - _____ (2) Set the binding control at the proper spread.
 - _____ (3) Place the binding behind the holding fingers.
 - _____ (4) Place the back cover last.
 - _____ (5) Lift the bound book off the binder.
 - _____ (6) Place the front cover face down.
 - _____ (7) Place lifts of punched paper face down.
 - _____ (8) Check the book to see if all pages are print-side up.
 - _____ (9) Pull the handle back to open the binding.
 - _____ (10) Pull the handle forward to the neutral position to release the binding.
- e. Placing a "✓" beside correct procedures in punching coversets.
 - _____ (1) The punching pattern starts one-half inch from the top and bottom edge of the cover.
 - _____ (2) Adjust left paper guide for the right edge of the paper.
 - _____ (3) Place scrap coverset into the machine first, centered, and pushed to the back-stop.
 - _____ (4) Where holes are needed, deactivate the push-pull pins.

- _____ (5) Pull the handle forward slowly.
- _____ (6) After punching a coverset, fold it in half to check evenness of edges.

5. List the steps in emptying the paper clip tray:

- a. _____
- b. _____
- c. _____
- d. _____

Demonstrate the ability to:

- a. Fan and job paper
- b. Load and operate the collator
- c. Operate paper cutter
- d. Operate paper drill
- e. Secure a saddleback stapler on table top
- f. Load the saddleback stapler
- g. Clear a staple jam
- h. Staple booklets
- i. Staple flat stacks of paper
- j. Operate the paper folder
- l. Operate the padding press
- m. Punch and bind a book

(NOTE: If the above skills have not been completed prior to the test, ask the instructor when they should be completed.)

UNIT IX

SUPPLEMENTARY MACHINES

ANSWERS TO UNIT TEST--COLLATOR

1. 4 a.6 b.7 c.5 d.1 e.2 f.3 g.2. a.✓ b. c.✓ d.

3. The list may include the following:

a. Be sure to disengage feed fingers in the bins
(or trays) not in use.b. Always fan and jog the paper before loading the
machines.

c. Check the feed rollers to see that they are clean.

d. Avoid overloading the machine.

UNIT IX
SUPPLEMENTARY MACHINES

ANSWERS TO UNIT TEST--PAPER CUTTER

1. 5 a.
 1 b.
 3 c.
 4 d.
 2 e.
2. a. Accurately cut large sheets of paper.
 b. Accurately cut large amounts of paper.
3. a.
 ✓ b.
 c.
 ✓ d.
 e.

UNIT IX
SUPPLEMENTARY MACHINES

ANSWERS TO UNIT TEST--PAPER DRILL

1. 9 a.

2 b.

7 c.

6 d.

8 e.

3 f.

5 g.

4 h.

1 i.

2. ✓ a.

✓ b.

 c.

3. a. hands

b. hair

c. clean

d. clogged

e. pressure

4. 4 a.

2 b.

8 c.

3 d.

6 e.

7 f.

5 g.

1 h.

UNIT IX
SUPPLEMENTARY MACHINES

ANSWERS TO UNIT TEST--SADDLEBACK STAPLER

1. a. staples
b. saddle table
c. tension release
d. pusher rod
e. c-clamp
f. face plate
g. staple remover
h. handle
2. a. Release tension knob before removing face plate.
b. Be sure stapler is clamped securely prior to machine operation.
c. Keep hands away from stapling area.
d. Remove defective staples with a staple remover only.
3.

<u>2</u>	a.	<u>4</u>	d.
<u>5</u>	b.	<u>1</u>	e.
<u>3</u>	c.		
4. a. The tension-release knob is turned slowly.
b. The face plate is removed.
c. The staple jam is cleared.
d. The face plate is replaced on the stapler.
e. The tension knob is secured back in place.
5.

<u>✓</u>	a.
<u> </u>	b.
<u> </u>	c.

UNIT IX
SUPPLEMENTARY MACHINES

ANSWERS TO UNIT TEST--PAPER FOLDER

1. 5 a.
 2 b.
 6 c.
 7 d.
 4 e.
 1 f.
 3 g.
2. ✓ a.
 ✓ b.
 ✓ c.
 ✓ d.
 e.
 f.
3. a. Avoid getting hair into the folder rollers.
 b. Make sure the machine is turned OFF before making
 any adjustments.

UNIT IX
SUPPLEMENTARY MACHINES

ANSWERS TO UNIT TEST--JOGGER AND PADDING PRESS

1. a. jogger
b. pads
c. padding cement
d. chipboard
e. water soluble
f. backboard
g. pressure board
2. a. It may consist of a small electric motor fastened to a wooden tray.
b. It has a motor shaft which is unbalanced with a weight.
c. It may contain a speed control to handle different weights of paper.
3. ☐ a.
☒ b.
☐ c.
4. ☐ a.
☒ b.
☐ c.
5. a. to combine loose sheets of paper
b. to fasten sheets of paper into a pod
6. a. clamping device
b. padding cement
c. padding cement brush

7. 2 a.
 3 b.
 5 c.
 1 d.
 6 e.
 4 f.

UNIT IX
SUPPLEMENTARY MACHINES

ANSWERS TO UNIT TEST--PUNCH AND BINDER

- | | |
|---|---|
| <p>1. <u> 7 </u> a.</p> <p> <u> 6 </u> b.</p> <p> <u> 9 </u> c.</p> <p> <u> 5 </u> d.</p> <p> <u> 10 </u> e.</p> <p> <u> 1 </u> f.</p> | <p> <u> 2 </u> g.</p> <p> <u> 11 </u> h.</p> <p> <u> 8 </u> i.</p> <p> <u> 4 </u> j.</p> <p> <u> 3 </u> k.</p> |
|---|---|
2. a. to bind loose sheets of paper together
- b. to make it easy to add and take out pages
3. ✓ a.
- b.
- c.
4. a. (1)
- (2)
- ✓ (3)
- ✓ (4)
- b. (b) (1)
- (d) (2)
- (a) (3)
- (c) (4)
- c. (1)
- ✓ (2)
- (3)
- ✓ (4)

- d. (a) (1)
(c) (2)
(b) (3)
(g) (4)
(i) (5)
(e) (6)
(f) (7)
(j) (8)
(d) (9)
(h) (10)

- e. _____ (1)
_____ (2)
✓ _____ (3)
_____ (4)
_____ (5)
✓ _____ (6)

5. a. The machine is placed on its back.
b. The tray is slid open, allowing the chips to fall out.
c. All papers chips are removed, and the tray is placed back in the unit.
d. The machine is placed right side up, and all stray paper clips are removed.

All skills to be developed on the job sheets will be evaluated to the satisfaction of the instructor.

UNIT X
MEASUREMENT

UNIT OBJECTIVE

After completing this unit, the student should be able to identify terms dealing with the inch (English), point, and metric systems. The student should also have an understanding of the scales or line gauges and be able to convert between the systems. This knowledge will be evidenced by demonstrating the use of each system and satisfactorily completing a unit test.

SPECIFIC OBJECTIVES

After completing this unit of instruction, the student should be able to:

1. Match terms, identify scale increments, and list the main graduations on an eighths rule
2. Match terms, complete sentences and identify parts of a letter
3. Match terms, match metric unit names, complete conversions, and identify true statements dealing with metric prefixes
4. Read the ruler in sixteenths
5. Read the ruler in eighths
6. Use the point system scale
7. Use the inch, point, and metric systems
8. Identify metric values using prefixes
9. Convert inches to metrics and metrics to inches

UNIT X
MEASUREMENT

SUGGESTED ACTIVITIES

- I. Instructor
 - A. Provide objective sheet
 - B. Discuss objective sheet
 - C. Pass out information sheet
 - D. Discuss information sheet
 - E. Make and show transparencies
 - F. Distribute and discuss assignment sheets
 - G. Demonstrate procedures outlined in assignment sheets
 - H. Give test
- II. Student
 - A. Read and discuss objective sheet
 - B. Read and discuss material contained in information sheet
 - C. Complete assignment sheets
 - D. Take test

INSTRUCTIONAL MATERIALS

- I. Included in this unit:
 - A. Objective sheet
 - B. Information sheet
 - C. Transparency masters
 - 1. X-TM-1--Point System Scale
 - 2. X-TM-2--Inch System Scale
 - 3. X-TM-3--Metric System Scale

4. X-TM-4--Letter Parts

D. Assignment sheets

1. Assignment Sheet #1--Reading a Ruler in Sixteenths
2. Assignment Sheet #2--Reading a Ruler in Eighths
3. Assignment Sheet #3--Using the Point System Scale
4. Assignment Sheet #4--Using the Inch, Point, and Metric Systems
5. Assignment Sheet #5--Identifying Metric Values Using Prefixes
6. Assignment Sheet #6--Converting Inches to Metrics and Metrics to Inches

E. Answers to Assignment sheets

F. Unit Test

G. Answers to unit test

II. References

- A. Leon, Dean Phillip. Graphics Master. 2nd ed., Los Angeles, California: Dean Léon Associates, 1973.
- B. Prast, Z. A. Photo-Offset Lithography. South Holland, Illinois: Goodheart-Wilcox Company, Inc., 1977.

UNIT X
MEASUREMENT

INFORMATION SHEET

I. Inch (English) System

A. Terms and Definitions

1. Accurate--correct, no error
2. Measurement--finding the size of an object
3. Dimension--measurement in length, width, height or distance around
4. Inch--a measure of length, equal to $1/12$ foot
5. Foot--a measure of length containing 12 inches
6. Yard--a measure of length equal to 3 feet or 36 inches
7. Scale or line gauge--ruler used by a printer, showing both inches and picas
8. Quarter--a measure of length consisting of $1/4$ inch
9. Eighth--a measure of length containing $1/8$ inch
10. Sixteenth--a measure of length, consisting of $1/16$ inch
11. Half--a measure of length, when referred to in inches, consisting of $1/2$ inch
12. Whole number--any natural number that is not broken into parts (EXAMPLE: 1, 2, 3, 4,.... 10, 11, etc.)
13. Fraction--a part of a whole number (EXAMPLE: $1/8$, $1/4$, $1/2$,.... $1/64$, $3/64$, etc.)
14. Graduation--the mark on a measuring tool indicating a certain size or amount
15. Increment--graduation, or increasing quantity

B. Graduation of a scale in inches

1. Scale Graduation

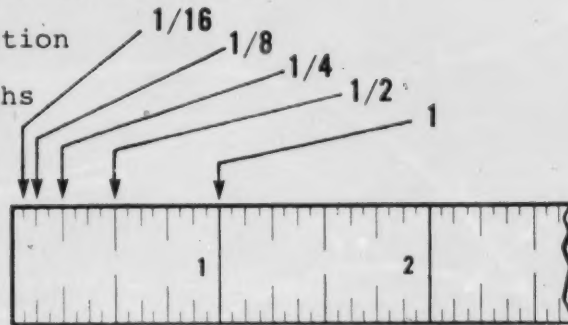
a. Sixteenths

b. Eighths

c. Fourths

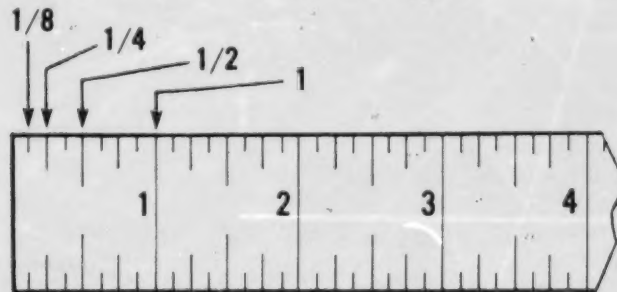
d. Halves

e. Inches



C. Reading the scale

1. Some scales have smaller graduations than others.
2. To make the scale easier to read, the graduation lines are different lengths.



II. Point System

A. Terms and definitions

1. Pica--a unit of measure for sizing printers' type; there are 6 picas to one inch
2. Point--a unit of measure for sizing printers' type; there are 72 points to one inch or 12 points to one pica
3. Agate--a unit of measure for sizing printers' type; consists of 5 1/2 points
4. Em--the square of one printer's type body size
5. En--one-half the width of an em
6. Type--engraved plate for letter-press printing

7. Type gauge--a ruler graduated in points and picas
8. Ascender--the part of a letter protruding above the X-Height Line
9. X-Height Lines--where the main body of a letter is formed
10. Descender--the part of a letter protruding below the X-Height Line
11. Type Square--EXAMPLE: Ascender, Descender, X-Height

B. Type Measurement

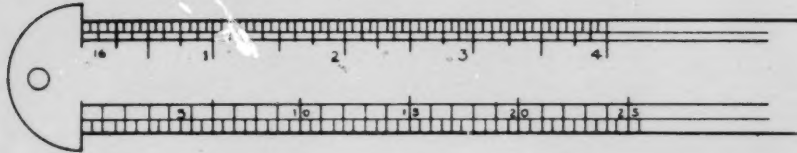
1. Line spacing or leading between lines is measured in points
2. Line lengths are measured in picas
3. Em is the term given to designate the square of a given type size
4. Agate lines are used to measure column depth (NOTE: an inch contains 14 agate lines)

The Relationship Between

<u>Points</u>	<u>Picas</u>	<u>Inches</u>
9	3/4	1/8
18	1 1/2	1/4
27	2 1/4	3/8
36	3	1/2
45	3 3/4	5/8
54	4 1/2	3/4
63	5 1/4	7/8
72	6	1

C. Points Scale

1. 12 points = 1 pica
2. 72 points = 1 inch
3. 6 picas = 1 inch



III. Metric System

A. Terms and definitions

1. Meter--the base unit for length, in the metric system, consisting of approximately 39 inches
2. Metric prefix--an affix attached to the beginning of a metric word
 - a. tera--denotes the value of trillions (1000000000000)
 - b. giga--denotes the value of billions (1000000000)
 - c. mega--denotes the value of millions (1000000)
 - d. kilo--denotes the value of thousands (1000)
 - e. hecto--denotes the value of hundreds (100)
 - f. deka--denotes the value of tens (10)
 - g. deci--denotes the value of tenths (0.1)
 - h. centi--denotes the value of hundredths (0.01)

- i. milli--denotes the value of thousandths (0.001)
 - j. micro--denotes the value of millionths
 - k. nano--denotes the value of billionths (0.000000001)
 - l. pico--denotes the value of trillionths (0.000000000001)
- 3. SI--(International System) Base Units
 - 4. Denotes--a metric prefix standing for the value of a number

B. Metric Tables

SI Base Units

<u>Quantity</u>	<u>Metric Unit Name</u>	<u>Unit Symbol</u>
Length	meter	m.
Mass	kilogram	kg.
Time	second	s.
Electric Current	ampere	A.
Luminous Intensity	candela	cd.
Temperature	kelvin	K.
Amount of Matter	mole	mol.

SI Metric Unit Prefixes

<u>Value</u>	<u>Submultiples & Multiples</u>	<u>Prefixes</u>	<u>Symbols</u>
0.000000000001	10^{-12}	pico	p
0.000000001	10^{-9}	nano	n
0.000001	10^{-6}	micro	u
0.001	10^{-3}	milli	m
0.01	10^{-2}	centi	c
0.1	10^{-1}	deci	d

10	10	deka	da
100	10^2	hecto	h
1000	10^3	kilo	k
1000000	10^6	mega	M
1000000000	10^9	giga	G
1000000000000	10^{12}	tera	T

Conversion Factors

Inches to Metrics

1 inch = 25.40000 mm
 1 inch = 2.540000 cm
 1 inch = 0.0254000 m

1 foot = 30.380000 cm
 1 foot = .30480000 m

1 yard = .91440000 m

1 mile = 1.609344 km

Metrics to Inches

1 millimeter = .0393700787 inch
 1 centimeter = .393700787 inch
 1 meter = 39.3700787 inches

1 centimeter = .032808398 foot
 1 meter = 3.2808398 feet

1 meter = 1.09361329 yards

1 kilometer = .62137119 mile

Length

Metric System

1000 millimeters = 1 meter

100 centimeters = 1 meter

1000 meters = 1 kilometer

Inch System

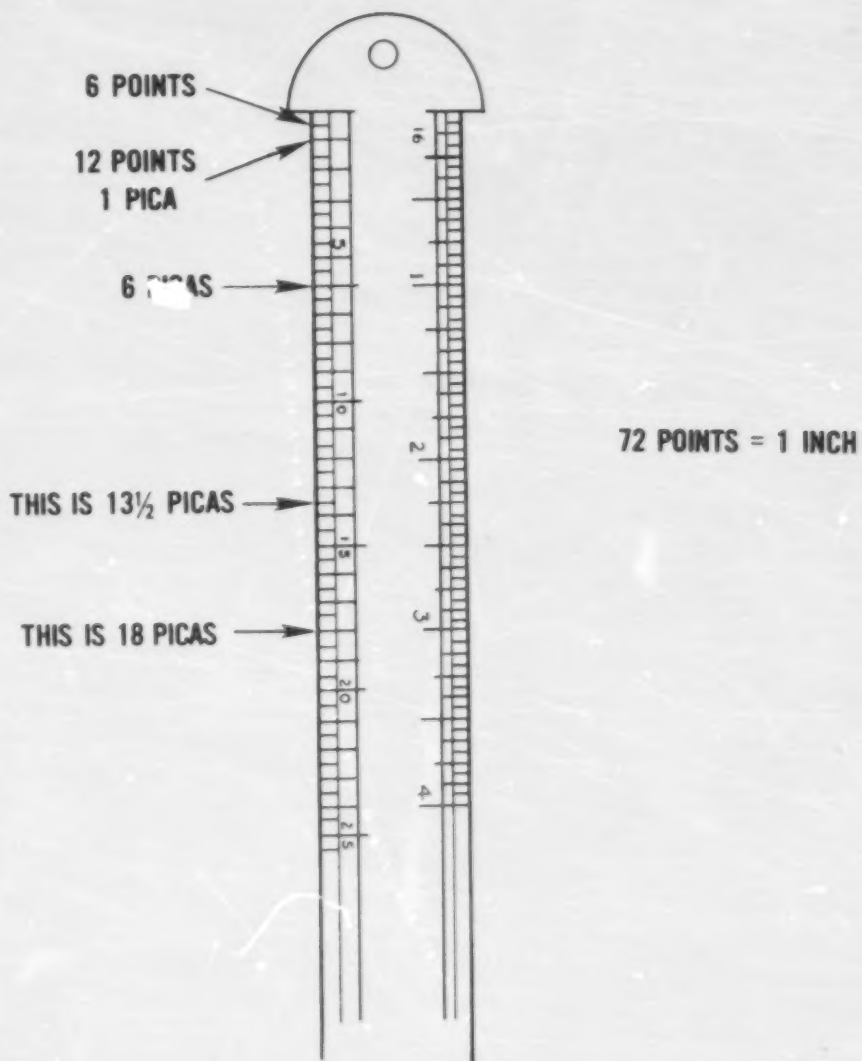
12 inches = 1 foot

3 feet = 1 yard

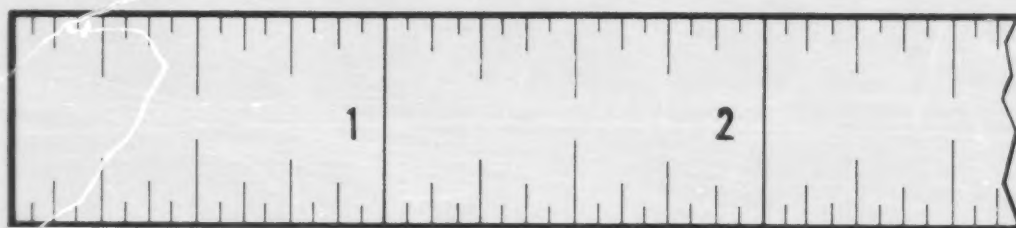
36 inches = 1 yard

5280 feet = 1 mile

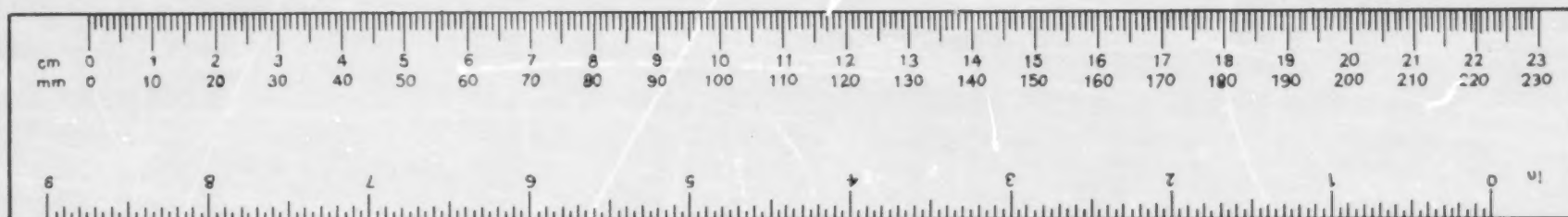
POINT SYSTEM SCALE



INCH SYSTEM SCALE



METRIC SYSTEM SCALE



LETTER PARTS

Typography



ASCENDER

X-HEIGHT

DESCENDER

UNIT X
MEASUREMENTS

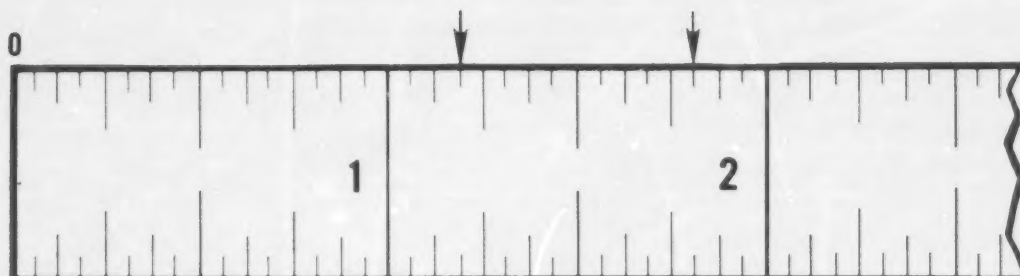
ASSIGNMENT SHEET #1--READING A RULER IN SIXTEENTHS

Directions: The scale below is divided into $1/16$ th inch spaces. Beginning at 0, write the correct measure at each arrow.

1.



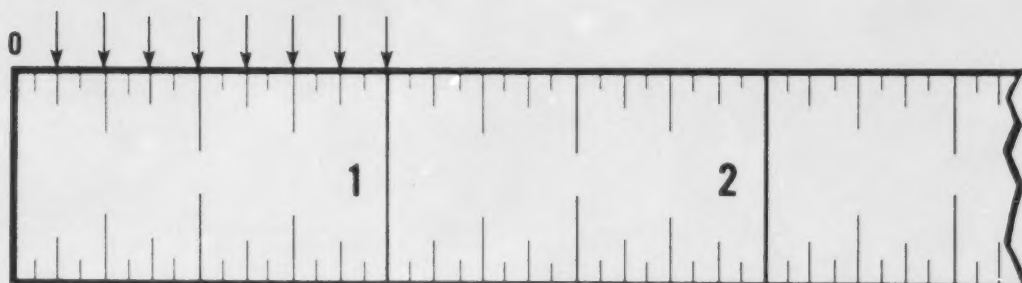
2. Directions: Find the distance to each arrow.



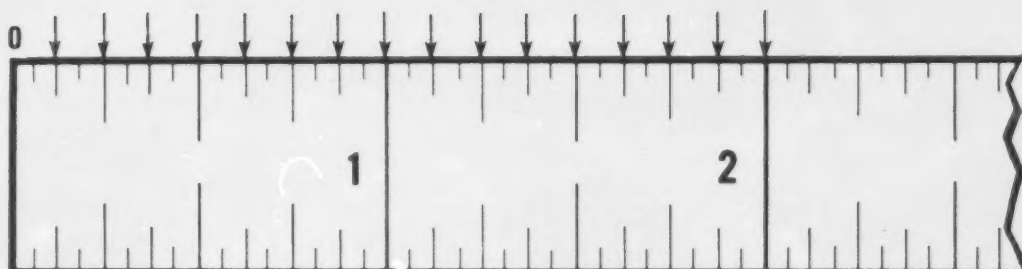
UNIT X
MEASUREMENT

ASSIGNMENT SHEET #2--READING RULER IN EIGHTHS

1. Directions: Label each $\frac{1}{8}$ " space from 0"-1" on the scale below in the spaces provided.



2. Directions: Draw a line 2 inches long and divide into $\frac{1}{8}$ " spaces; label at each arrow.



UNIT X
MEASUREMENT

ASSIGNMENT SHEET #3--USING THE POINT SYSTEM SCALE

Directions: Using the line gauge, draw lines accurately to the following lengths

1. 30 picas
2. 17 picas
3. 13 picas
4. 12 points
5. 25 picas
6. 24 points
7. 1 pica
8. 7 picas
9. 36 points
10. 10 picas

UNIT X
MEASUREMENT

ASSIGNMENT SHEET #4--USING THE INCH, POINT, AND METRIC
SYSTEMS

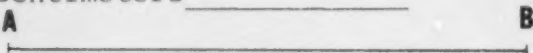
Directions: Measure the lines below and give the measurement in inches, points, and centimeters.

1. 

inches _____

points _____

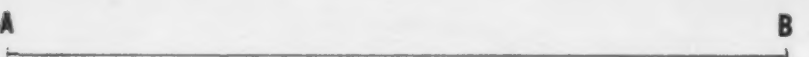
centimeters _____

2. 

inches _____

points _____

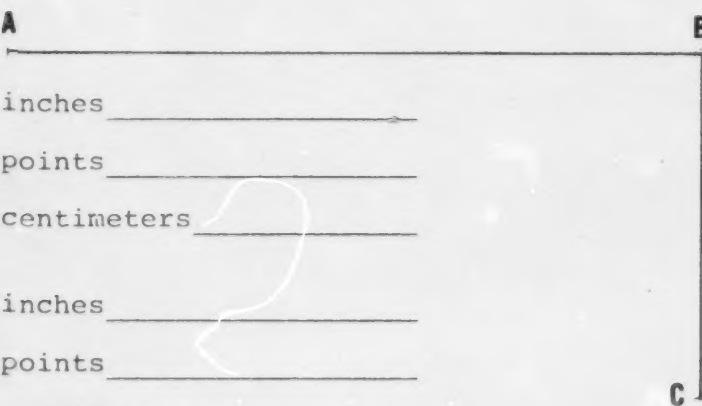
centimeters _____

3. 

inches _____

points _____

centimeters _____

4. 

AB inches _____

points _____

centimeters _____

BC inches _____

points _____

centimeters _____

UNIT X
MEASUREMENT

ASSIGNMENT SHEET #5--IDENTIFYING METRIC VALUES, USING
PREFIXES

Directions: Write the correct metric prefix to the right
of the following values.

Values	Prefixes
A. 0.0000000000001	_____
B. 0.0000000001	_____
C. 0.000001	_____
D. 0.001	_____
E. 0.1	_____

G. 10	_____
H. 100	_____
I. 1000	_____
J. 1000000	_____
K. 1000000000	_____
L. 10000000000000	_____

UNIT X

MEASUREMENT

ASSIGNMENT SHEET #6--CONVERTING INCHES TO METRICS AND
METRICS TO INCHES

Directions: Complete the following problems by inserting the correct figure in each blank.

Inches to Metrics

1. 1 inch = _____ meters
2. 1 foot = _____ meters
3. 1 yard = _____ meters
4. 1 mile = _____ kilometers

Meters to Inches

1. 1 meter = _____ inches
2. 1 meter = _____ feet
3. 1 meter = _____ yards
4. 1 kilometer = _____ mile

Metric System

1. _____ millimeters = 1 meter
2. _____ centimeters = 1 meter
3. _____ meters = 1 kilometer

Inch System

1. _____ inches = 1 foot
2. _____ feet = 1 yard
3. _____ inches = 1 yard
4. _____ feet = 1 mile

UNIT X
MEASUREMENT

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

1.



2. A. $1 \frac{3}{16}$ inch

B. $1 \frac{13}{16}$ inch

Assignment Sheet #2

1.

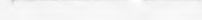


Assignment Sheet #2

2.



Assignment Sheet #3

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 

Assignment Sheet #4

1. inches 5
points 360
centimeters 12.7

2. inches 3
points 216
centimeters 11.43

3. inches 4 1/2
points 324
centimeters 11.43

4.
AB inches 4
points 288
centimeters 10.16

BC inches 2
points 144
centimeters 5.08

Assignment Sheet #5

- A. pico
- B. nano
- C. micro
- D. milli
- E. centi

- F. deci
- G. deka
- H. hecto
- I. kilo
- J. mega
- K. giga
- L. tera

Assignment Sheet #6

Inches to Metrics

- 1. 0.0254000
- 2. 0.30480000
- 3. 0.91440000

Metrics to Inches

- 1. 39.3700787
- 2. 3.2808398
- 3. 1.09361329
- 4. 0.62137119

Metric System

- 1. 1000
- 2. 100
- 3. 1000

Inch System

- 1. 12
- 2. 3
- 3. 36
- 4. 5280

UNIT X
MEASUREMENT

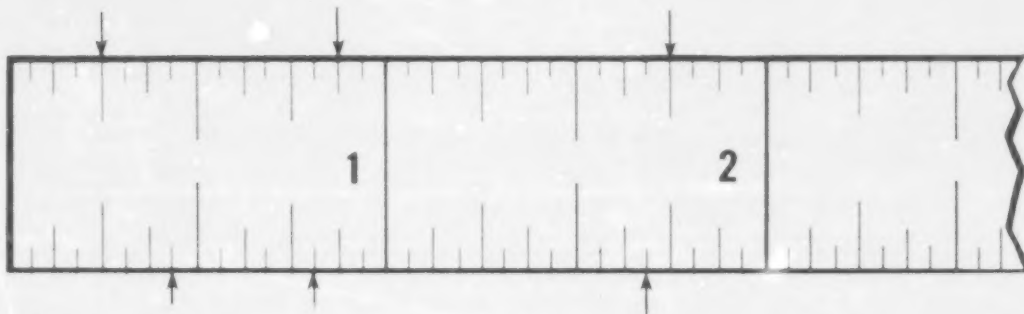
UNIT TEST

1. a. Match the terms on the left relating to the inch system with their definitions on the right.

- | | |
|-------------------------|---|
| _____ (1) accurate | (a) finding the size of an object in height, length, or width |
| _____ (2) measurement | |
| _____ (3) dimension | (b) measurement in length width, or height or distance around |
| _____ (4) inch | |
| _____ (5) foot | (c) correct, no error |
| _____ (6) yard | (d) a measure of length, containing 12 inches |
| _____ (7) scale | |
| _____ (8) quarter | (e) a measure of length equal to 1/12 foot |
| _____ (9) eighth | (f) a measure of length, equal to 3 feet or 36 inches |
| _____ (10) sixteenth | |
| _____ (11) half | (g) a measure of length, consisting of 1/4 inch |
| _____ (12) whole number | |
| _____ (13) fraction | (h) ruler, used by a printer, showing inches and picas |
| _____ (14) graduation | |
| _____ (15) increment | (i) any natural number that is not broken into parts |
| | (j) a measure of length, consisting of 1/16 inch or 1/2 eighth |
| | (k) a measure of length, containing 1/8 inch or 1/2 quarter |
| | (l) a measure of length, when referred to in inches, consisting of 1/2 inch |

- (m) graduation or increasing quantity
- (n) a part of a whole number
- (o) the mark on a measuring tool showing a certain size or amount

b. Identify the following increments of a $1/16$ inch scale in the spaces provided.



c. List the four main graduations found on a eighths rule.

- (1)
- (2)
- (3)
- (4)

2. a. Match the terms on the left relating to the point system with their definitions on the right.

- | | |
|--------------------------|---|
| _____ (1) pica | (a) a unit of measure for sizing printers' type; there are 72 to one inch or 12 to one pica |
| _____ (2) point | (b) a unit of measure for sizing printers' type; there are 6 to one inch |
| _____ (3) agate | (c) the square of one printers' type body size |
| _____ (4) em | (d) a unit of measure for sizing printers' type; consists of 5 1/2 points |
| _____ (5) type | (e) the part of a letter protruding below the X-height line |
| _____ (6) en | (f) engraved plate for letter press printing |
| _____ (7) type gauge | (g) one-half the width of an em |
| _____ (8) ascender | (h) where the main body of a letter is formed |
| _____ (9) X-height lines | (i) a ruler graduated in points and picas |
| _____ (10) descender | (j) the part of a letter protruding above the X-height line |

- b. Complete the following sentences by placing the correct words in the blanks.

- (1) Twelve points equal one _____.
- (2) One inch equals _____ points.
- (3) One inch equals six _____.
- (4) Line lengths are measured in _____ when using Type measurement.
- (5) When using Type measurement, line spacing, or

leading between lines is measured in _____.

- c. Identify the parts of a letter in the spaces provided below.

Typography

3. a. Match the terms on the left relating to the metric system with their definition on the right.

_____ (1) meter	(a) an affix attached to the beginning of a metric word
_____ (2) metric prefix	(b) the base unit for length, consisting of approximately 39 inches

- b. Match the terms on the left with the metric unit names on the right.

_____ (1) length	(a) mole
_____ (2) mass	(b) meter
_____ (3) line	(c) kelvin
_____ (4) electric current	(d) kilogram
_____ (5) luminous intensity	(e) candela
_____ (6) temperature	(f) second
_____ (7) amount of matter	(g) ampere

c. Complete the following conversions by filling in the blank provided.

(1) 1000 millimeters = _____ meter

(2) _____ centimeters = 1 meter

(3) _____ meters = 1 kilometer

(4) _____ inches = 1 foot

(5) _____ feet = 1 yard

(6) _____ inches = 1 yard

d. Identify the following true statements by placing a "✓" beside those statements that are true concerning metric prefixes.

_____ (1) Giga denotes the value of 1000000000000

_____ (2) Tera denotes the value of 1000000000

_____ (3) Nega denotes the value of 1000000

_____ (4) Kilo denotes the value of 1000

_____ (5) Hecto denotes the value of 10

_____ (6) Deka denotes the value of 100

_____ (7) Deci denotes the value of 0.1

_____ (8) Centi denotes the value of 0.01

_____ (9) Milli denotes the value of 0.000001

_____ (10) Micro denotes the value of 0.001

_____ (11) Nano denotes the value of 0.000000001

_____ (12) Pico denotes the value of 0.000000000001

4. Read the ruler in sixteenths

5. Read the ruler in eighths

6. Use the point system scale

7. Use the inch, point, and metric systems

8. Identify metric values using prefixes
9. Convert inches to metrics and metrics to inches

(NOTE: If activities #4-#9 have not been completed, prior to the test, ask the instructor when they should be completed.)

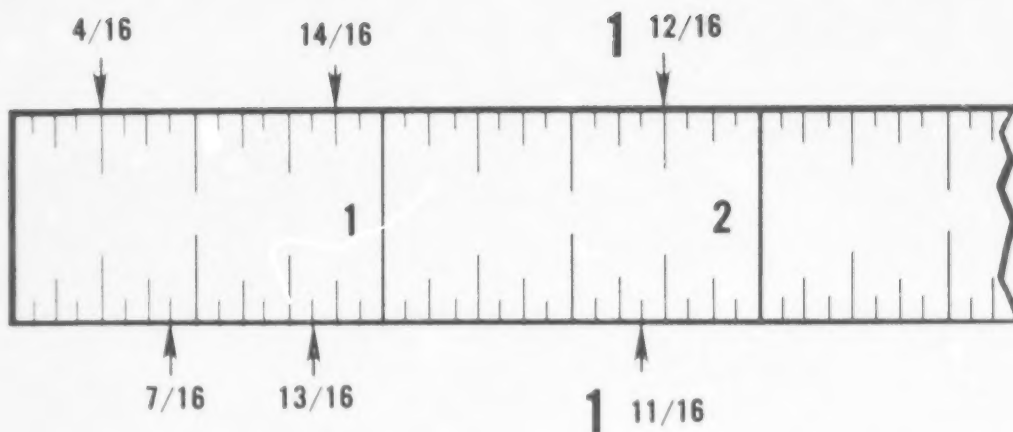
UNIT X

MEASUREMENT

ANSWER TO UNIT TEST

1. a. c (1) k (9)
a (2) j (10)
b (3) l (11)
e (4) i (12)
d (5) n (13)
f (6) o (14)
h (7) m (15)
g (8)

b.



- c. (1) eighth
(2) fourth
(3) half
(4) inch

2. a. b (1) g (6)
 a (2) i (7)
 d (3) j (8)
 c (4) h (9)
 f (5) e (10)

- b. (1) pica
(2) 72
(3) picas
(4) picas
(5) points

c.

Typography 

3. a. b (1)
 a (2)

- b. b (1) e (5)
 d (2) c (6)
 f (3) a (7)
 g (4)

- c. (1) 1
(2) 100
(3) 1000
(4) 12
(5) 36
(6) 5280

d. _____ (1)	_____ ✓ (7)
_____ (2)	_____ ✓ (8)
_____ ✓ (3)	_____ (9)
_____ ✓ (4)	_____ (10)
_____ (5)	_____ ✓ (11)
_____ (6)	_____ ✓ (12)

#4-#9 Evaluated to the satisfaction of the instructor.

UNIT XI

LAYOUT

UNIT OBJECTIVE

After completing this unit, the student should be able to identify and explain terms dealing with layout and have an understanding of the general format. The student should also be familiar with the Roman and Gothic letters. This knowledge will be evidenced through demonstration and by successfully completing a unit test.

SPECIFIC OBJECTIVES

After completing this unit of instruction, the student should be able to:

1. Match the terms dealing with layout with their proper definitions
2. Identify statements dealing with layout general format
3. Complete statements concerning layout using Roman letters
4. Describe strokes used when forming Gothic letters
5. Write letters in front of true statements concerning measurements
6. List characteristics of pressure-sensitive letters
7. List procedures used when making a layout
8. State type styles
9. List the safety rules concerning layout
10. Use Roman letters
11. Use Gothic letters
12. Space words
13. Complete a thumbnail sketch
14. Demonstrate the ability to:
 - a. Draw lines
 - b. Make a comprehensive layout

UNIT XI

LAYOUT

SUGGESTED ACTIVITIES

I. Instructor:

- A. Provide objective sheet
- B. Discuss objective sheet
- C. Pass out information sheet
- D. Discuss information sheet
- E. Make and show transparencies
- F. Distribute and discuss assignment and job sheets
- G. Demonstrate procedures outlined in assignment and job sheets
- H. Give test and evaluate results

II. Student:

- A. Read and discuss objective sheet
- B. Read and discuss material contained in information sheet
- C. Complete assignment and job sheets
- D. Take test

INSTRUCTIONAL MATERIALS

I. Included in this unit:

- A. Objectives
- B. Information sheet
- C. Transparencies
 1. XI-TM-1--Gothic Letters
 2. XI-TM-2--Roman Letters
 3. XI-TM-3--T-Square

4. XI-TM-4--Line Gauge
5. XI-TM-5--Triangles
6. XI-TM-6--Light Table

D. Assignment sheets

1. Assignment Sheet #1--Using Roman Letters
2. Assignment Sheet #2--Using Gothic Letters
3. Assignment Sheet #3--Spacing Words
4. Assignment Sheet #4--Completing a Thumbnail Sketch

E. Answers to assignment sheets

F. Job sheets

1. Job Sheet #1--Drawing Lines
2. Job Sheet #2--Making a Comprehensive Layout

G. Test

H. Answers to test

II. References:

- A. Prast, Z.A. Photo-Offset Lithography. Illinois: The Goodheart-Willcox Company, Inc., 1977.
- B. Lem, Dean. Graphic Master 2. California: Dean Lem Associates, 1977.
- C. Carlsen, Darvey E. Graphic Arts. 4th ed. Illinois: Chas. A. Bennett Company, Inc., 1976.

UNIT XI

LAYOUT

INFORMATION SHEET

I. Terms and definitions

- A. Line gauge--A ruler showing inches, points, and picas
- B. Points--A unit of measure for sizing printer's type; there are 72 points to one inch or 12 points to one pica
- C. Pica--A unit of measure for sizing printer's type; there are 6 picas to one inch
- D. Light table--A glass-top table with a light under the glass; used for tracing pressure-sensitive letters and stripping negatives
- E. Pressure-sensitive letters--Preprinted letters on a waxed surface that can be transferred to another paper
- F. Thumbnail sketch--The beginning idea of a layout done on a small scale
- G. Rough draft--A layout drawn to actual size with the fine points not included
- H. Comprehensive layout--The layout in final camera-ready copy
- I. Kern, kerned type--The part of the letter face that overhangs the letter body
- J. Leading--Spacing between letters
- K. Fitness--Matching the paper and type to the message being printed
- L. Tone--Relating the style of type to the message (formal letters)
- M. Balance--Arranging the characters on a page in a pleasing way
- N. Line of golden proportion--Above center on a page
- O. Spacing--Arranging words or letters in proper intervals

II. General format

- A. Should be arranged for easy eye movement: information arranged in a method to keep the eyes from jumping back and forth
- B. Arrange living objects facing toward center of the page

(NOTE: Arrange the short lines to follow in the direction you wish the eye to move)

- C. Layout contains the following:
 - 1. Cut-out picture or illustration
 - 2. Display title
 - 3. Short paragraph or phrases about the display
 - 4. Signature--Name of the firm doing the advertising
- D. A layout should:
 - 1. Attract attention
 - 2. Create interest
 - 3. Create desire
 - 4. Tell how to satisfy the desire

III. Roman letters

- A. Roman letters are made using thick and thin strokes
 - 1. The letter parts leaning from left to right require thick strokes (Example A)
 - 2. The rest of the leaning strokes are thin with the exception of Z
 - 3. The vertical strokes are thin with the exceptions of
 - a. M--The first vertical stroke is thin and the second vertical stroke is thick
 - b. U--The first vertical stroke is thick and the second vertical stroke is thin

IV. Gothic letters: All Gothic letters are made with the same thickness of stroke to make the letters easier to use in layout

V. Measurement

A. Line gauge or printer's rule measures points, picas, and inches

1. The point system was devised as a system for measuring print
2. Pierre Fourier invented the point system in 1737
3. United State press adopted in 1887
4. Only measure used by printers today
5. One point measures $1/72$ inch
6. 12 points equal 1 inch
7. 6 picas equal 1 inch

B. Points and picas are used to measure and name type sizes: Beginning at 6 points, the sizes are graduated upward at 2-point intervals. Refer to Unit X, Measurement, for more details

VI. Pressure-sensitive letters

- A. Another method of setting type for headlines
- B. A more expensive method than using a photocomposing machine
- C. A large variety of type is available
- D. A quicker, easier-to-use method than line drawing

VII. Beginning the layout

A. Thumbnail sketch

1. A sketch used to jot ideas to show how finished ideas will look

2. Two or three thumbnail sketches should be made to show various ideas

B. Rough draft layout

1. Should be drawn to actual size
2. Lettering should be actual size

C. Comprehensive layout

1. Final copy with set type
2. Actual photographs or illustrations

VIII. Selecting type styles

- A. The type style and paper should be in harmony
- B. The tone of the message should be considered when choosing type

Examples:

1. Formal message--formal type
2. Forceful message--bold type
3. Humor message--informal type

IX. Layout safety rules

- A. Keep materials clean and free of fingerprints and smudges
- B. Handle masking knife with care

GOTHIC LETTERS

GOTHIC UPPER CASE
ABCDEFGHIJKLMNOPQRSTUVWXYZ

lower case

abcdefghijklmnopqrstuvwxyz

ROMAN LETTERS

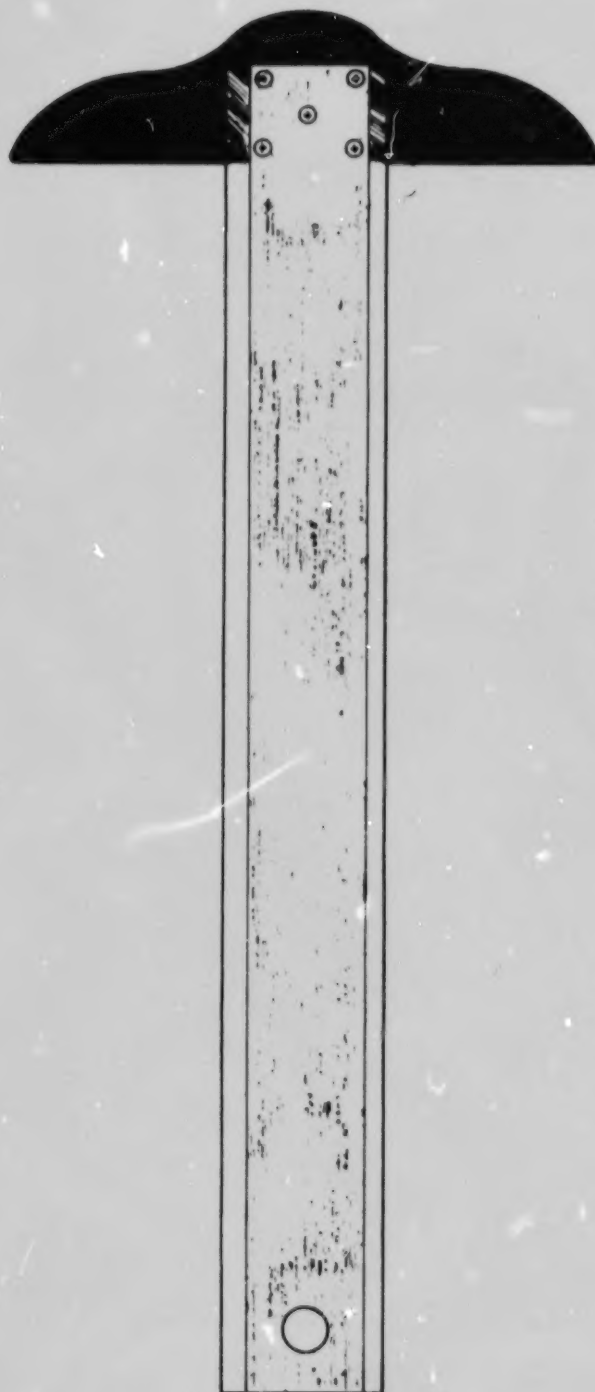
ROMAN UPPER CASE

ABCDEFGHIJKLMNOPQRSTUVWXYZ

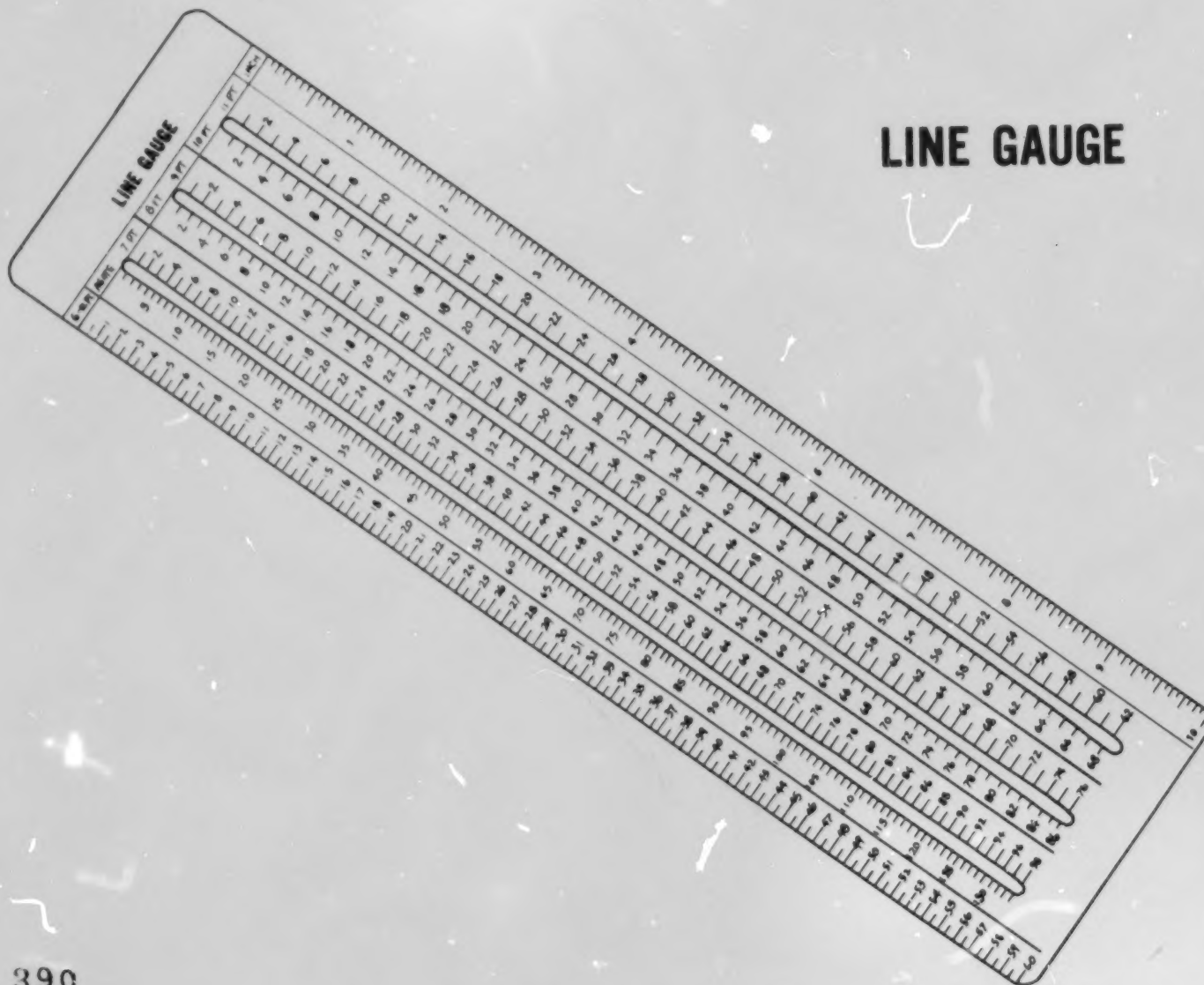
lower case

abcdefghijklmnopqrstuvwxyz

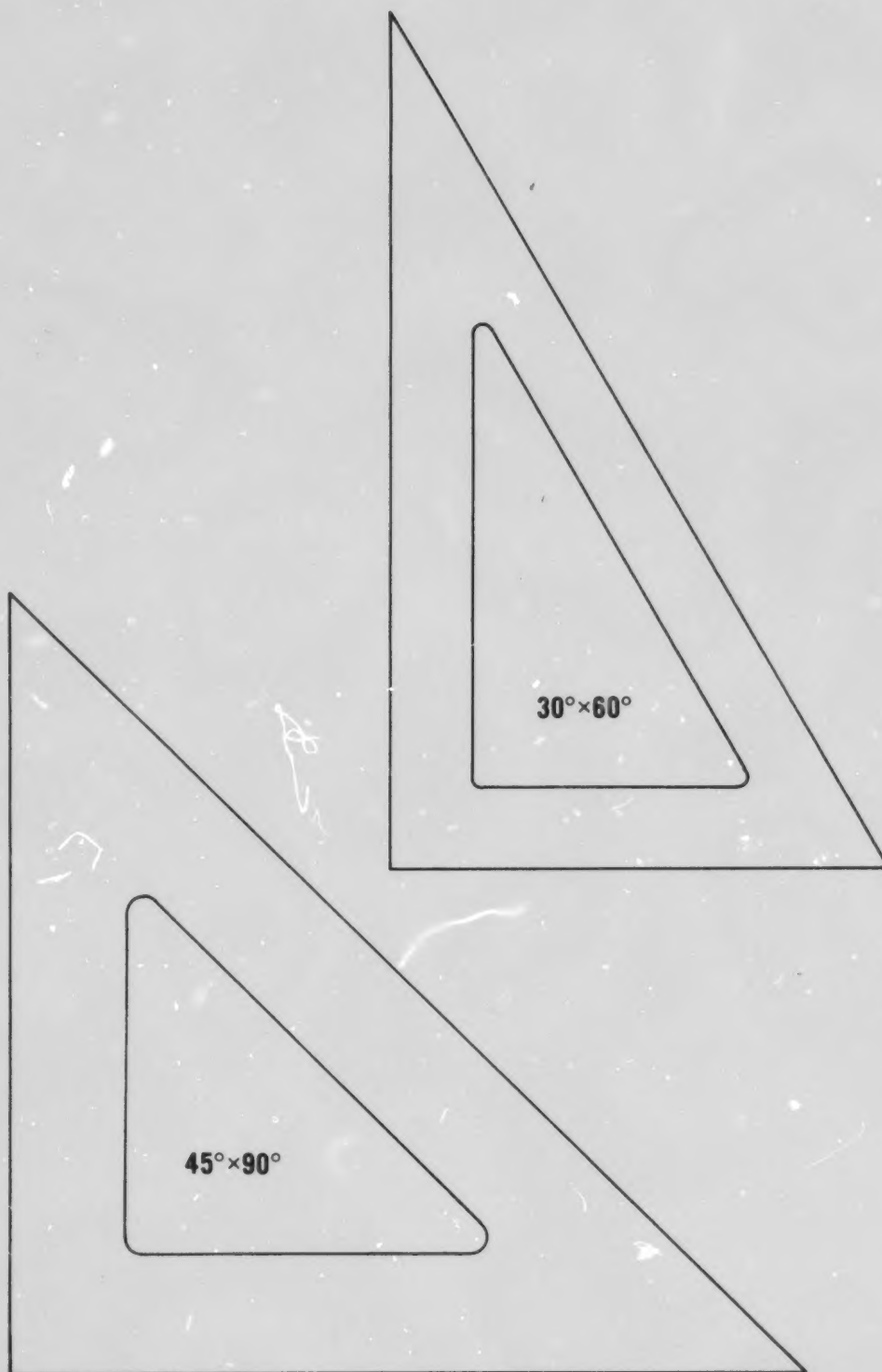
T-SQUARE



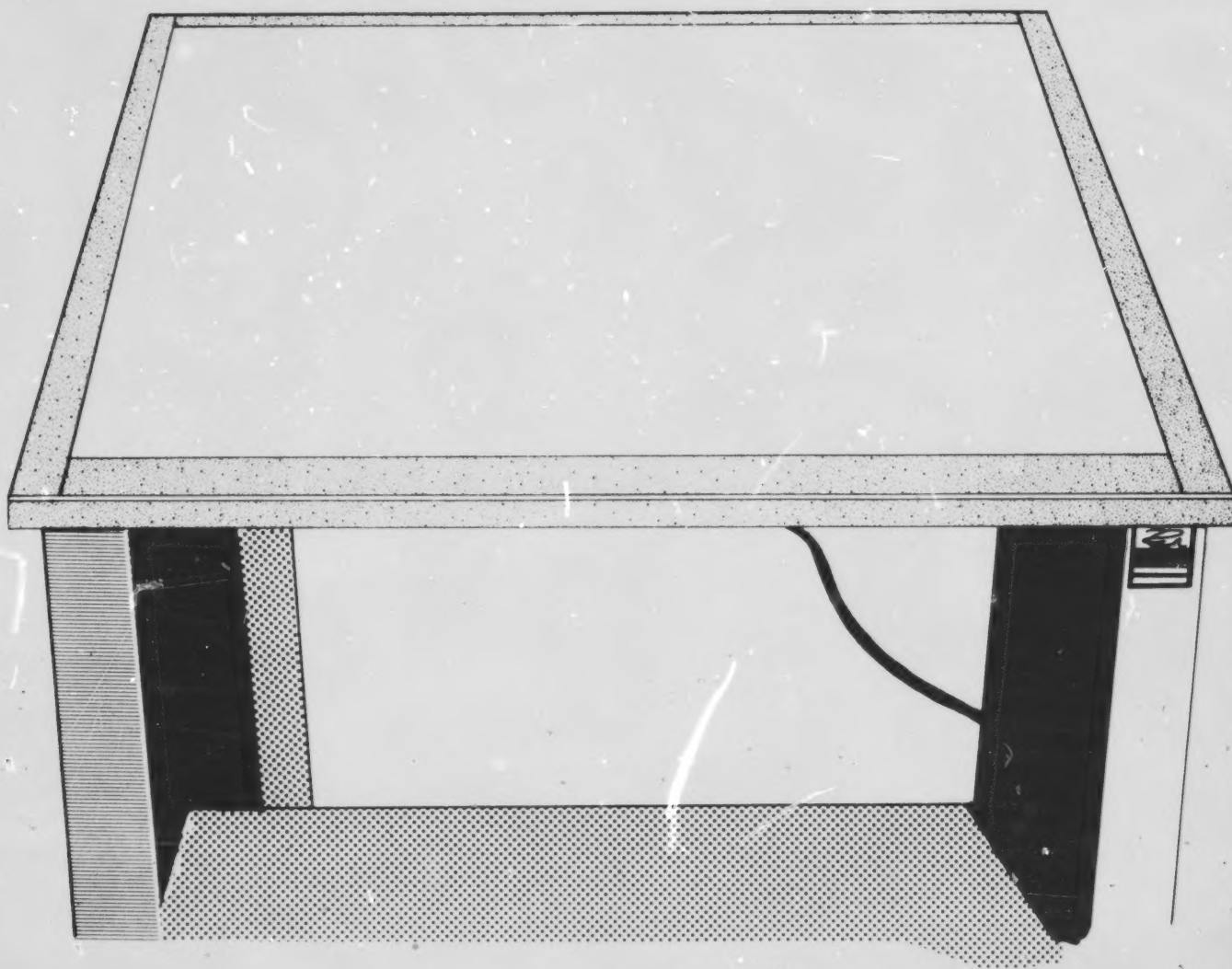
LINE GAUGE



TRIANGLES



LIGHT TABLE



UNIT XI

LAYOUT

ASSIGNMENT SHEET #1--USING ROMAN LETTERS

Directions: Referring to TM-2 and using a separate sheet of tracing paper, complete the following assignment:

1. Place your piece of tracing paper over the capital letters (A-Z), centering the line of letters.
2. Trace over the letters, using a pencil.
(NOTE: The letters are made with thick and thin strokes.)
3. Draw two guide lines and freehand one line of upper case letters and one line of lower case letters from A-Z.
4. Print your name on the bottom of the page in Roman letters, freehand.

UNIT XI

LAYOUT

ASSIGNMENT SHEET #2--USING GOTHIC LETTERS

Directions: Referring to TM-1 and using a separate sheet of paper, complete the following assignment.

1. Approximately two inches from the top of the page, trace one line of the alphabet (A-Z) in upper case letters.
2. Approximately four inches from the top of the page, draw two parallel lines across the page. Freehand the remaining lower case letters from A-Z.
3. At the top of the page, print your name in Gothic letters, free style.

UNIT XI

LAYOUT

ASSIGNMENT SHEET #3--SPACING WORDS

Directions: Complete the following assignment on spacing, using a separate sheet of typing paper.

1. In the center of your paper, draw a smaller page that is 28 picas wide and 42 picas deep.
2. Inside the smaller page, place a line 5 picas from the edge of all four sides.
3. Inside the marginal lines, use the words Power, Beauty, Speed, and Knowledge. Use Roman lettering for Power and Beauty and use Gothic lettering for Speed and Knowledge.
4. Using the golden line of proportion, letter each of these words on a separate page.

UNIT XI

LAYOUT

ASSIGNMENT SHEET #4--COMPLETING A THUMBNAIL SKETCH

Directions: Complete the following assignment on a thumbnail sketch using a program cover:

1. Select and design a thumbnail sketch of a program cover.
2. Use only one word on the cover.
3. Be sure to observe the line of golden proportion.

UNIT XI

LAYOUT

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1 - Assignment Sheet #4

Evaluated to the satisfaction of the instructor

UNIT XI

LAYOUT

JOB SHEET #1--DRAWING LINES

I. Tools and equipment:

- A. T-square
- B. Triangle
- C. Masking tape
- D. Line gauge
- E. Four sheets of paper
- F. Sharp pencils

II. Procedures:

- A. Assemble the tools and supplies at the light table.
- B. The T-square should be placed on the light table with the top overhanging the left edge.
- C. Line up the paper to get it straight. Hold the T-square in place as the paper is being straightened.
- D. Tape all four corners of the paper.
- E. Practice making parallel lines. With a sharpened pencil held at a slight angle away from the T-square, draw the lines.
- F. After you can make correct lines in this direction, practice drawing vertical (up and down) lines.
- G. Place the triangle next to the T-square, being sure to hold the triangle and T-square in place.
- H. Practice vertical lines.
- I. When you can draw lines this way, tape down a clean sheet of paper.
- J. Draw a line across the sheet near the bottom edge.

- K. Using the line gauge, make 6 marks, one inch apart, on this line.
- L. Draw vertical lines through each mark. To do this, the pencil should first be placed on the mark. Then bring triangle to the pencil. Stop lines near the top of paper.
- M. Draw 5 lines, one inch apart, on the left.
- N. Make lines through each mark across the page, using the T-square to make these lines straight. The sheet of paper should look like the example the instructor has done.

UNIT XI

LAYOUT

JOB SHEET #2--MAKING A FINAL LAYOUT

I. Tools and equipment:

- A. Line gauge
- B. Camera-ready art
- C. Tracing paper
- D. Graph paper
- E. Transparent tape
- F. Pencil
- G. Eraser
- H. Preset type from the photocomposing machine
- I. Composing machine
- J. Adhesive (e.g., 3M Spray)
- K. Masking knife

II. Procedures:

- A. Select subject of advertisement.
- B. Draw a thumbnail sketch of chosen advertisement.
- C. Select size and style of type.
- D. Using the thumbnail sketch, prepare the rough layout.
- E. Draw the layout to actual size.
- F. Place the print and art work (this is a rough drawing of actual size) in the most attractive way to be eye-catching.
- G. The final layout is now ready to be made.
- H. Assemble all the above materials. Go to the light table.

- I. Tape the graph paper to the table.
- J. Tape the tracing paper on top of the graph paper.
- K. Very carefully line the preset type at the exact location, using the rough layout.
- L. Place the camera-ready art in the rough-drawn area.
- M. Have the instructor check the work.
- N. Very carefully pick up each piece of art, put adhesive on the back, and replace.
- O. Use the same procedure with the preset type, making a special note to see that it is straight.
- P. Print your name on the back with pencil in Roman letters.
- Q. Clean up work area.

UNIT XI

LAYOUT

UNIT TEST

1. Match the terms at left with their correct definitions by placing the number in the space provided.

- | | |
|-------------------------------------|---|
| _____ a. Line gauge | 1. The spacing between letters |
| _____ b. Points | 2. Arranging words or letters in proper intervals |
| _____ c. Picas | 3. Above center on a page |
| _____ d. Light table | 4. Relating the style of type to the message |
| _____ e. Pressure-sensitive letters | 5. Arranging the characters on a page in a pleasing way |
| _____ f. Thumbnail sketch | 6. Matching the paper and type to the message being printed |
| _____ g. Rough draft | 7. A unit of measure for sizing printer's type; there are 72 to an inch or <u>12</u> to one pica |
| _____ h. Comprehensive layout | 8. A ruler showing inches, points, and picas |
| _____ i. Kern-kerned type | 9. The beginning idea of a layout done on small scale |
| _____ j. Leading | 10. A glass-top table with a light under the glass; used for tracing, pressure-sensitive letters, and stripping negatives |
| _____ k. Fitness | |
| _____ l. Tone | |
| _____ m. Balance | |
| _____ n. Line of golden proportion | |
| _____ o. Spacing | |

11. Preprinted letters on a waxed surface that can be transferred to another paper
 12. This is the final camera-ready copy
 13. Part of the face of the letter overhangs the body
 14. A unit of measure for sizing printer's type; there are 6 to one inch
 15. Using the thumbnail sketch --an actual-size layout with rough-drawn pictures
2. Identify the following statements that are true by placing a "✓" to the left of the true statements.
- ☐ a. A layout should be designed for easy eye movement.
 - ☐ b. Living objects should be faced away from the center of the page.
 - ☐ c. Arrange the short lines to follow in the direction you want the eye to move.
 - ☐ d. Layout should contain a cutout, display title, phrase about the display, and the name of the firm doing the advertising.
 - ☐ e. A layout should attract attention, create interest, create desire, and give information how to satisfy the desire.
3. Complete the following statements concerning layout using Roman letters:
- a. Roman letters are composed of two types of strokes. What are they?
 - 1.
 - 2.
 - b. All strokes that lean to the right are _____.

- c. The letter _____ is the exception to the rule concerning left leaning strokes.
- d. List the exceptions to the rule concerning vertical strokes.
 - 1.
 - 2.
 - 3.
- 4. Describe the strokes used when forming a Gothic letter.
- 5. Circle the letter in front of the following statements that are true concerning measurement.
 - a. A line gauge measures points, picas, and inches
 - b. The point system was invented by Pierre Fourier
 - c. Printers use many methods of measurement beside the point system
 - d. A short definition of the line gauge is a printer's rule
- 6. List four characteristics of pressure-sensitive letters.
 - a.
 - b.
 - c.
 - d.
- 7. List the three procedures used when making a layout.
 - a.
 - b.
 - c.

8. State the three type styles.
 - a.
 - b.
 - c.
9. List two safety rules for layout.
 - a.
 - b.
10. Use Roman letters.
11. Use Gothic letters.
12. Space words.
13. Complete a thumbnail sketch.
14. Demonstrate the ability to:
 - a. Draw lines
 - b. Make a comprehensive layout

(NOTE: If Activities #10 - #14 have not been completed prior to the test, ask the instructor when they should be completed.)

UNIT XI

LAYOUT

ANSWERS TO UNIT TEST

1. 8 a.7 b.14 c.10 d.11 e.9 f.15 g.12 h.13 i.1 j.6 k.4 l.5 m.3 n.2 o.2. ✓ a. b.✓ c.✓ d.✓ e.

3. a. 1. thick
2. thin
b. thick
c. z
d. 1. N
2. M
3. U
4. All Gothic letters are made with the same thickness of strokes.
5. a.
b.
c.
d.
6. a. Another method of setting type for headlines.
b. A more expensive method.
c. A large variety of type available.
d. A quicker, more flexible method.
7. a. Thumbnail sketch
b. Rough draft
c. Comprehensive layout
8. a. Formal type
b. Bold type
c. Comely type
9. a. Keep materials clean, free of fingerprints and smudges.
b. Handle masking knife with care.
- 10-14. Evaluated to the satisfaction of the instructor.

UNIT XII

PHOTOCOMPOSING MACHINE

UNIT OBJECTIVE

After completing this unit, the student should be able to identify terms dealing with the photocomposing machine and should be familiar with printing and developing procedures. This knowledge will be evidenced by demonstrating the use of the photocomposing machine and satisfactorily completing a unit test.

SPECIFIC OBJECTIVES

After completing this unit of instruction, the student should be able to:

1. Match terms relating to the photocomposing machine with their correct definitions
2. Select the positive points of the photocomposing machine
3. Match terms with the internal and external photocomposing machine parts
4. Identify the correct order for printing
5. State the developing procedures
6. List the safety rules for the photocomposing machine
7. State the purpose of the photocomposing machine
8. Identify photocomposing machine parts
9. Demonstrate the ability to:
 - a. Print letters with the photocomposing machine
 - b. Develop print from the photocomposing machine

UNIT XII
PHOTOCOMPOSING MACHINE

SUGGESTED ACTIVITIES

- I. Instructor:
 - A. Provide objective sheet.
 - B. Discuss objective sheet.
 - C. Pass out information sheet.
 - D. Discuss information sheet.
 - E. Make and show transparencies.
 - F. Distribute and discuss assignment and job sheets.
 - G. Demonstrate procedures outlined in assignment and job sheets.
 - H. Give test and evaluate results.
- II. Student:
 - A. Read and discuss objective sheet.
 - B. Read and discuss material contained in information sheet.
 - C. Complete assignment and job sheets.
 - D. Take test.

INSTRUCTIONAL MATERIALS

- I. Included in this unit:
 - A. Objective sheet
 - B. Information sheet
 - C. Transparency Masters
 - 1. XII-TM-1-Photocomposing Machine--Internal Parts
 - 2. XII-TM-2-Photocomposing Machine--External Parts

D. Assignment Sheet #1--Identifying Photocomposing Machine Parts

E. Answers to assignment sheet

F. Job sheets

1. Job Sheet #1--Print Letters With the Photocomposing Machine

2. Job Sheet #2--Develop Print From the Photocomposing Machine

G. Unit test

H. Answers to unit test

II. Reference:

1. Strip Printer, Operation and Parts Manual. Oklahoma: Strip Printer, Inc., Box 18-895, 21 N.W. 41st Street, Oklahoma City 73118.

UNIT XII

PHOTOCOMPOSING MACHINE

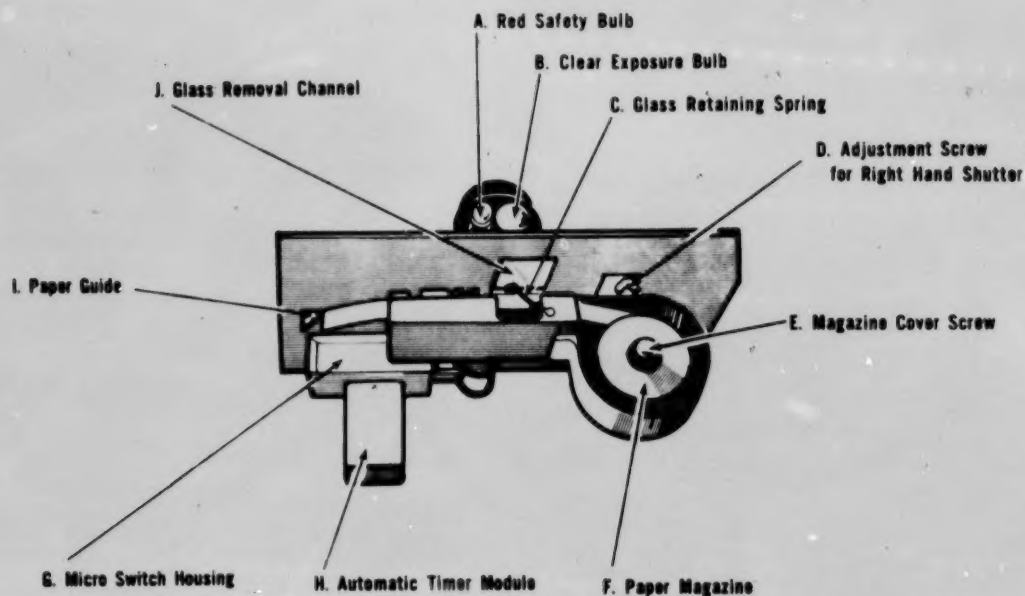
INFORMATION SHEET

I. Terms and definitions

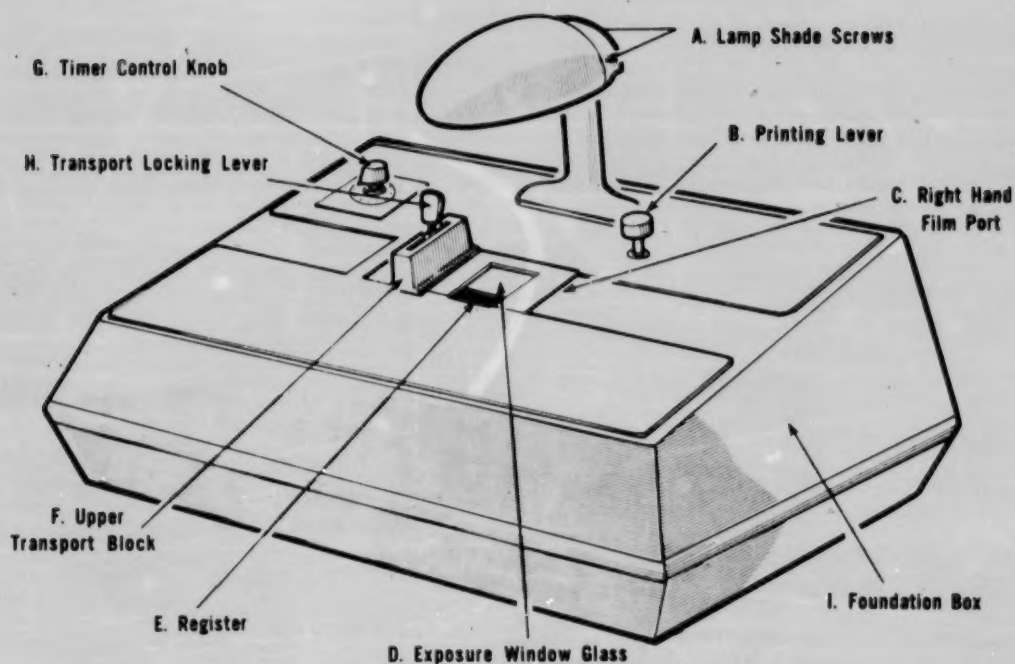
- A. Font--a filmstrip containing different typefaces
- B. Depress--to hold down
- C. Paper threader--a device to aid in reloading photo paper through a machine
- D. Subdue--reducing the amount of light
- E. Fog--a blur on a print or film
- F. Shutter--a mechanical device that limits the amount of light exposed to film or photo paper
- G. Prolong--to continue or extend the time
- H. Accuracy--exactness
- I. Expose--subjecting film or photo paper to light
- J. Competent--being qualified or adequate
- K. Condense--make more compact
- L. Kerning--moving certain letters closer together to get proper spacing
- M. Photo paper--light-sensitive strip of paper that may accept an image
- N. Timer control knob--regulates the length of exposure of the white light bulb to the photo paper
- O. Register scale--scale which provides the measurements for proper spacing of letters
- P. Right hand film port--slot in which the font is inserted into the proper channel
- Q. Transport rocking lever--device which locks the font, left hand shutter, and photo paper together
- R. Lamp shade screws--metal fasteners that are removed to replace the clear or red light bulb

- S. Printing lever--handle which raises the compression table and activates the exposure bulb
 - T. Foundation box--provides a base for the mechanical part of the machine and provides a lightproof compartment for the photo paper
 - U. Exposure window--a glass that opens to allow the white light bulb to expose the photo paper
 - V. Upper transport block--a device, working with the transport locking lever, used to lock the font, left-hand shutter, and photo paper together
 - W. Paper magazine--a red transparent photo paper holder which allows a visible check on the paper supply
- II. Positive pointers of the photocomposing machine
- A. Used to achieve professional-looking type
 - B. Eliminates need for hand lettering
 - C. Simple to use
 - D. Easy to install
 - E. Makes proper spacing of letters easier

III. Internal and external parts of the photocomposing machine



INTERNAL PARTS



EXTERNAL PARTS

IV. Procedures for printing

- A. Put all equipment, tools, and supplies in a handy arrangement
- B. Check to see if you have enough photo paper
- C. Select font to be used
- D. Place font into machine and move font to letter you want
- E. Hold the upper transport block, lock the transport lever, and move the upper transport block to the left to line up the letter
- F. Hold the printing lever down with the right thumb and release the upper transport lock. When the light goes off, remove thumb from printing lever.
- G. Print letters
- H. Lock the transport and move it all the way to the left then release it. Repeat this 5 times. Tear photo paper off machine.

V. Developing procedure

- A. After the photo paper has been torn off the machine, place the end torn off into the developer, keep strip in solution, and develop until letters are sharp and black
- B. Place strip into fixer for 15 seconds
- C. Wash strip in water for 30-60 seconds
- D. Prepare strip for drying

VI. Safety rules

- A. Keep hands dry while working with the photocomposing machine
- B. Be careful when using chemicals; they can cause damage to clothing and body.
- C. Clean up all spills
- D. The photocomposing paper edges are sharp, so be careful when handling

VII. Purpose of the photocomposing machine is to produce high quality lettering for use in preparing headlines for newspapers, covers, or circulars.

PHOTO COMPOSING MACHINE—INTERNAL PARTS

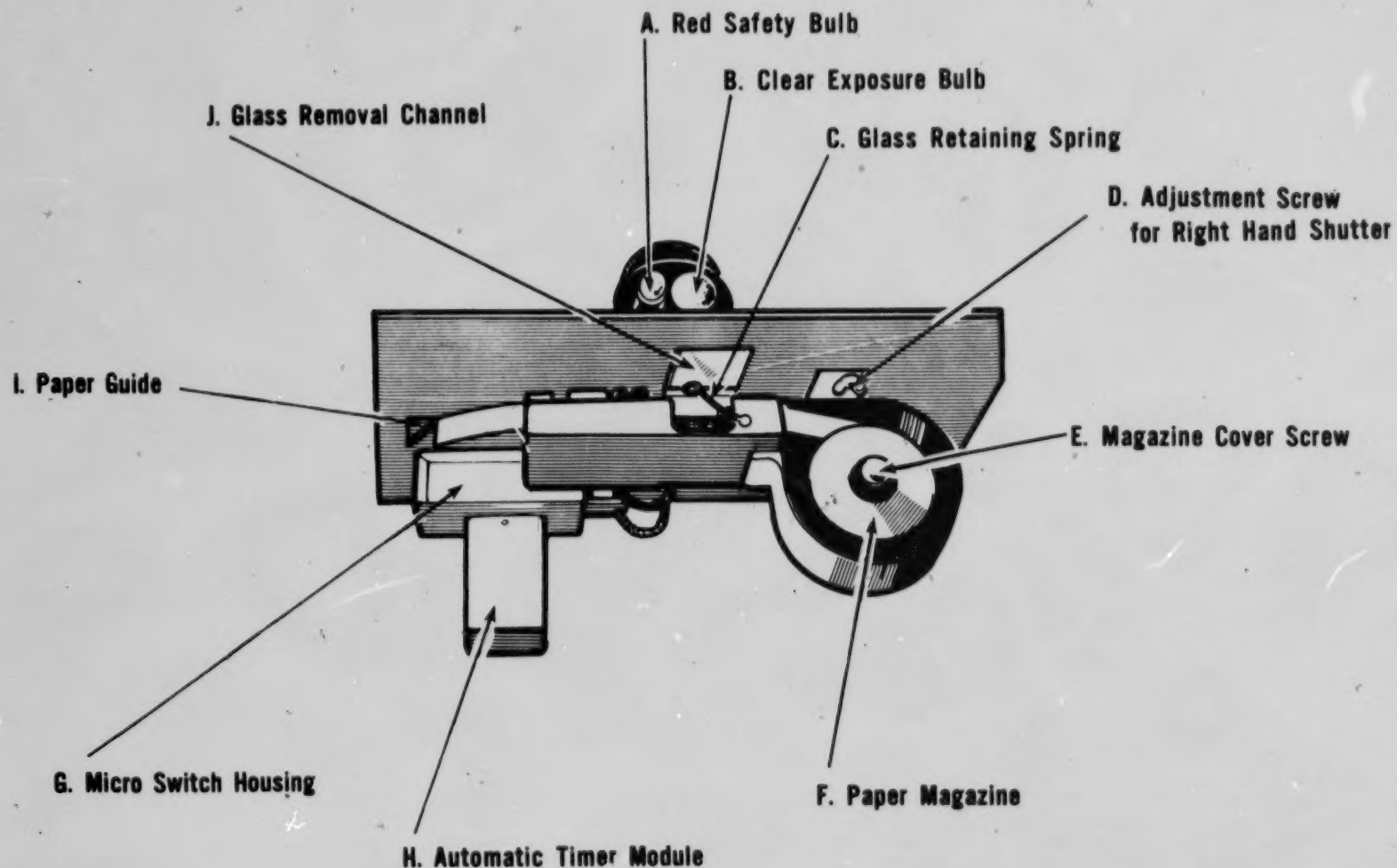
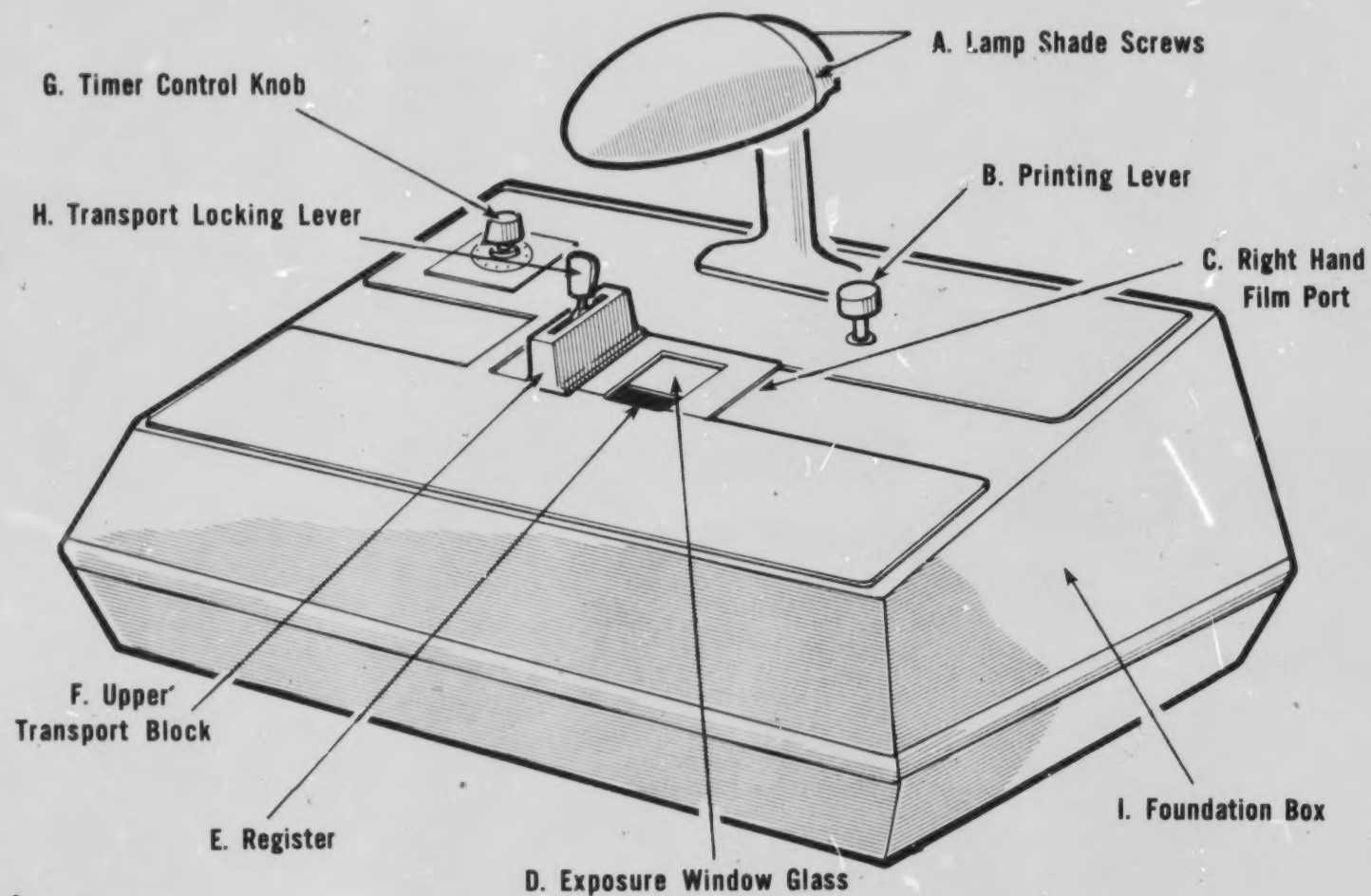


PHOTO COMPOSING MACHINE—EXTERNAL PARTS



UNIT XII
PHOTOCOMPOSING MACHINE

ASSIGNMENT SHEET #1--IDENTIFYING PHOTOCOMPOSING MACHINE
PARTS

Directions: Write in the blanks whether the following terms are Internal or External parts of the photocomposing machine.

<u>Terms</u>	<u>Internal or External</u>
1. Red safety bulb	a. _____
2. Lamp shade screw	b. _____
3. Right-hand film port	c. _____
4. Clear exposure bulb	d. _____
5. Glass retaining spring	e. _____
6. Exposure window	f. _____
7. Register scale	g. _____
8. Magazine cover screw	h. _____
9. Upper transport block	i. _____
10. Timer Control knob	j. _____
11. Paper magazine	k. _____
12. Micro switch housing	l. _____
13. Transport locking lever	m. _____
14. Foundation box	n. _____
15. Automatic timer module	o. _____
16. Paper guide	p. _____

UNIT XII
PHOTOCOMPOSING MACHINE

Answers to Assignment Sheet #1

- a. Internal
- b. External
- c. External
- d. Internal
- e. Internal
- f. External
- g. External
- h. Internal
- i. External
- j. External
- K. Internal
- l. Internal
- m. External
- n. External
- o. Internal
- p. Internal

UNIT XII

PHOTOCOMPOSING MACHINE

JOB SHEET #1--PRINT LETTERS WITH THE PHOTOCOMPOSING MACHINE

I. Tools and Equipment:

Photo paper

Paper towels

Fonts

II. Procedures:

- A. Print first and last name to use as a guide while using machine
- B. Put equipment, tools, and supplies into a working arrangement with developer, fixer, and water in proper containers, and paper towels for clean-up.
- C. Lift top of machine and check to see if there is enough photo paper in paper magazine. (If 15" or less is left, refill magazine, following instructions in manual)
- D. Select font to be used.
- E. With letters right side up and left edge entering machine, place font into machine through the right-hand film port, push it through on top of the shutter, under, and through the transport block on the left of the exposure window. If the font slips under the lefthand shutter, grasp the part of the shutter to the left of the transport block with the thumb and third finger and pull it up, pushing the font past the shutter break.
- F. Move font to letter desired. Hold font with the thumbs and index fingers to line up the register marks. Line up the register mark on the left side of the letter (by moving the font) with the zero register mark on the scale.
- G. Hold the upper transport block with the thumb and second finger of the left hand.
- H. Lock the transport lever by pulling forward on it with the index finger of the left hand while holding the upper transport block tightly with the thumb and second finger of the left hand.

- I. Pull the transport locking lever tightly toward you, and move the upper transport block to the left until the register mark on the right side of the letter is lined up over the zero registration mark. (Move the upper transport block with only the thumb and second finger, not the finger holding the locking lever, being certain to pull the transport to the left in a straight line using a smooth movement. This prevents the letters from being out of alignment.)
- J. Hold down the printing lever with the right thumb. This lights the white exposure bulb and locks the upper transport block in place as the letter is exposed. Remove the left hand from the upper transport block as soon as the light comes on. The exposure light is timed and will automatically go off. When the light goes off, release the printing lever and the left hand shutter will close over the letter than has been printed.
- K. Continue procedures until all letters have been printed.
- L. Lock the transport, move it all the way to the left, and then release it. Repeat 5 times. This moves the photo paper out of the machine enough to ensure all letters will be on the photo paper torn off to be developed.

UNIT XII

PHOTOCOMPOSING MACHINE

JOB SHEET #2--DEVELOP PRINT FROM THE PHOTOCOMPOSING MACHINE

I. Tools and Equipment:

Developer

Fixer

Water

Paper towels

II. Procedures:

- A. Place the end that was torn off the photocomposing machine into developer first.
- B. Submerge strip and develop until the letters are sharp and black.
- C. Place the strip in the fixer for 15 seconds.
- D. Wash strip in water for 30-60 seconds.
- E. Prepare strip for drying.
- F. Clean up area.

UNIT XII
PHOTOCOMPOSING MACHINE

UNIT TEST

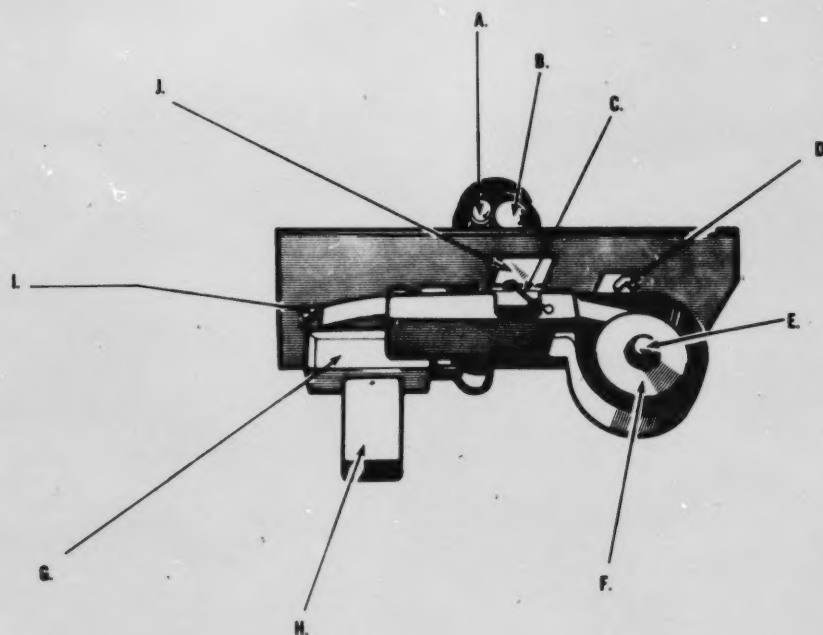
1. Match the terms on the left with the definitions on the right.

- | | |
|--------------------------------|--|
| ___ a. Font | 1. A red transparent photo paper holder which allows a visible check on the paper supply |
| ___ b. Subdue | 2. Causes the compression table to be raised and the exposure bulb activated |
| ___ c. Fog | 3. Provides a base for the mechanical portion of the photocomposing machine |
| ___ d. Shutter | 4. Device which locks together the font, left-hand shutter, and photo paper |
| ___ e. Prolong | 5. A filmstrip containing different typeface |
| ___ f. Expose | 6. Reducing the amount of light |
| ___ g. Kerning | 7. Provides the measurements for proper spacing of letters |
| ___ h. Register scale | 8. Moving certain letters closer together to get proper spacing |
| ___ i. Transport locking lever | 9. A blur on a print or film |
| ___ j. Printing lever | 10. A mechanical device that limits the amount of light exposed to film or photo paper |
| ___ k. Foundation box | |
| ___ l. Paper magazine | |

11. To continue or extend the time
 12. Subjecting film or photo paper to light
2. Select the advantages of the photocomposing machine by placing a "✓" in the space provided.
- ☐ a. Does not eliminate the need for hand lettering
 - ☐ b. Used to achieve professional-looking type
 - ☐ c. Simple to use
 - ☐ d. Difficult to install
 - ☐ e. Makes properly spacing of letters easier

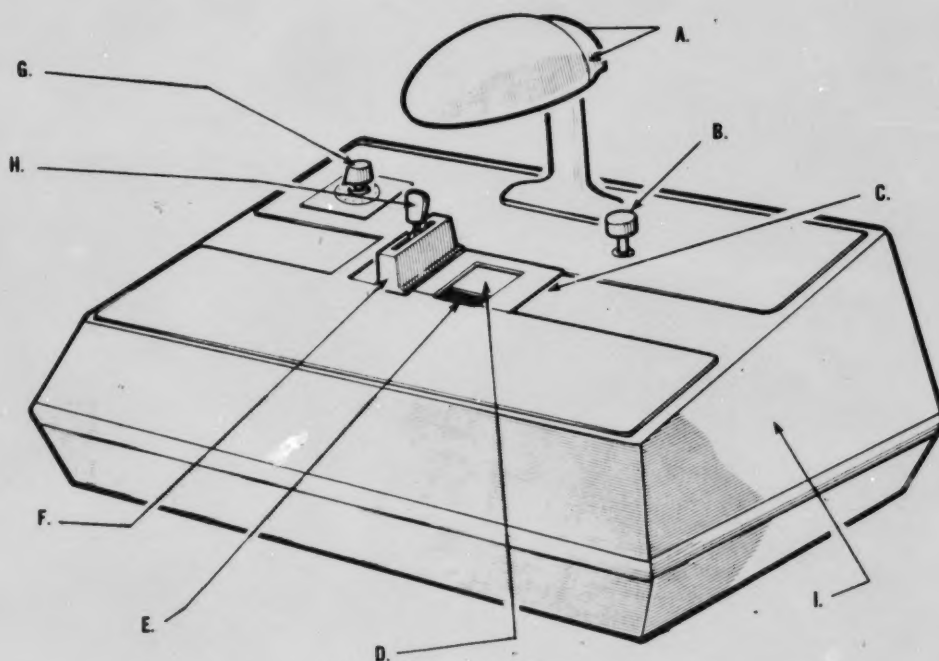
3. a. Match the terms with the internal photocomposing machine parts below.

- ___ 1. Glass removal channel
- ___ 2. Paper guide
- ___ 3. Red safety bulb
- ___ 4. Automatic timer module
- ___ 5. Clear exposure bulb
- ___ 6. Micro switch housing
- ___ 7. Glass retaining spring
- ___ 8. Paper magazine
- ___ 9. Adjustment screw for righthand shutter
- ___ 10. Magazine cover screw



3. b. Match the terms with the external photocomposing machine parts below:

- _____ 1. Timer control knob
- _____ 2. Register scale
- _____ 3. Righthand film port
- _____ 4. Transport locking lever
- _____ 5. Lamp shade screws
- _____ 6. Printing lever
- _____ 7. Foundation box
- _____ 8. Exposure window glass
- _____ 9. Upper transport block



4. Identify the correct sequence of the following steps dealing with procedures for printing by placing the letters a-h in the spaces provided.

- ___ 1. Check to see if supply of photo paper is adequate.
- ___ 2. Select font to be used.
- ___ 3. Assemble equipment, tools, and supplies into a working arrangement.
- ___ 4. Place font into machine and move font to letter desired.
- ___ 5. Hold the printing lever down with the right thumb and release the upper transport lock. When the light goes off, remove thumb from printing lever.
- ___ 6. Hold the upper transport block, lock the transport lever, and move the upper transport block to the left, to line up the letter.
- ___ 7. Lock the transport and move it all the way to the left then release it, repeat this 5 times, then tear photo paper off machine.
- ___ 8. Print letters.

5. State the four developing procedures.

- a.
- b.
- c.
- d.

6. List four safety rules for the photocomposing machine.

- a.
- b.
- c.
- d.

7. State the purpose of the photocomposing machine.

8. Identify photocomposing machine parts.

9. Demonstrate the ability to:

a. Understand procedures of printing

b. Understand procedures of developing

(NOTE: If activities #8 and #9 have not been completed prior to the test, ask the instructor when they should be completed.)

UNIT XII
PHOTOCOMPOSING MACHINE

ANSWERS TO UNIT TEST

1. 5 a.
6 b.
9 c.
10 d.
11 e.
12 f.
8 g.
7 h.
4 i.
2 j.
3 k.
1 l.

2. a.
✓ b.
✓ c.
 d.
✓ e.

3. A. j 1.
i 2.
a 3.
h 4.
b 5.

- g 6.
c 7.
f 8.
d 9.
e 10.

3. B. i 1. b 6.
 f 2. d 7.
 c 3. e 8.
 h 4. g 9.
 a 5.

4. b 1. f 5.
 c 2. e 6.
 a 3. h 7.
 d 4. g 8.

5. a. After the photo paper has been torn off the machine, place the end torn off into the developer, submerge strip and develop until letters are sharp and black.
- b. Place strip into fixer for 15 seconds.
- c. Wash strip in water for 30-60 seconds.
- d. Prepare strip for drying.
6. a. Keep hands dry while working with the photocomposing machine.
- b. Be cautious when using chemicals.
- c. Clean up all spills.
- d. The photocomposing paper edges are sharp, so be careful when handling.
7. To produce high quality lettering for use in preparing headlines for newspapers, covers, or circulars.
- 8-9. Evaluated to the satisfaction of the instructor.

UNIT XIII

THERMAL PROCESS

UNIT OBJECTIVE

After completing this unit, the student should be able to identify terms dealing with the thermal process and have an understanding of thermal process purposes. The student should also be familiar with preparing and making thermal masters and transparencies. This knowledge will be evidenced through demonstration and by successfully completing a unit test.

SPECIFIC OBJECTIVES

After completing this unit of instruction, the student should be able to:

1. Match terms relating to the thermal process with their definitions
2. State the main uses of the thermal process
3. Identify true statements concerning preparing a copy for a thermal master
4. Place steps in the correct sequence for making a thermal master
5. Identify true statements concerning preparing a copy for an overhead transparency
6. List the steps for making an overhead transparency
7. List the safety rules for operating a thermal process machine
8. Label parts of the thermal master unit
9. Identify thermal master unit parts
10. Demonstrate the ability to:
 - a. Make a thermal master
 - b. Make an overhead transparency

UNIT XIII
THERMAL PROCESS

SUGGESTED ACTIVITIES

I. Instructor

- A. Provide student with objective sheet
- B. Discuss objective sheet
- C. Pass out information sheet
- D. Discuss information sheet
- E. Make and show transparencies
- F. Distribute and discuss assignment and job sheets
- G. Demonstrate procedures outlined in assignment and job sheets
- H. Give test

II. Student

- A. Read and discuss objective sheet
- B. Read and discuss material contained in information sheet
- C. Complete assignment and job sheets
- D. Take test

INSTRUCTIONAL MATERIALS

I. Included in this unit

- A. Objective sheet
- B. Information sheet
- C. Transparencies
 - 1. XIII-TM-1--Thermal Master Unit
 - 2. XIII-TM-2--Infrared Copier

D. Assignment sheet

Assignment Sheet #1--Identifying Thermal Master Chart Parts

E. Answers to assignment sheet

F. Job sheets

1. Job Sheet #1--Making a Thermal Master
2. Job Sheet #2--Making an Overhead Transparency

G. Unit test

H. Answers to unit test

II. References

- A. Hanna, Marshall J., Estelle L. Popham, and Rita Sloan Lilton. Secretarial Procedures and Administration. 6th ed. Cincinnati, Ohio: South-Western Publishing Company, 1973.
- B. Pasewark, William R. Duplicating Machine Processes. 2nd ed. Cincinnati, Ohio: South-Western Publishing Company, 1975.

UNIT XIII
THERMAL PROCESS

INFORMATION SHEET

I. Terms and definitions

- A. Thermal process--A system which uses an infrared light to burn images on specially treated master units or transparency film
- B. Thermal master--A unit which includes a polyester film carbon sheet under a paper master sheet which is used with a thermal copier
- C. Overhead transparency--A sheet of acetate which allows images to be drawn, or to be copied, using the thermal process
- D. Polyester film carbon--The material in the thermal master unit which actually produces the image
- E. Tissue interleave sheet--A thin sheet which protects a finished master unit until ready to duplicate
- F. Snap-out master--A piece of paper in the thermal master unit on which the image is burned
- G. Stub--The perforated top of the thermal master unit
- H. Built-in carrier--A piece of paper on the bottom of the thermal master unit which helps guide the original through the thermal copier
- I. Correcting fluid--A liquid used to correct errors on a printed copy which does not allow light to pass through
- J. Control dials--Switches on a thermal process machine which controls how fast the copy goes through the machine
- K. Original copy or transparency master--A copy from which a thermal master unit or overhead transparency is produced

L. Pressure-sensitive letters--Wax-coated letters which are transferred by rubbing the surface of the letters

M. Infrared--A heat-transfer process

II. Two Purposes of the Thermal Process

A. The thermal process machine can make spirit masters quickly from a printed copy

B. The thermal process machine can make copies on a transparent film which is used on the overhead projector

III. Preparing the Copy for a Thermal Master

A. Works best if the printed material is black and white

B. No correcting fluid should be used

C. Will produce a better thermal master unit if an electrostatic copy is made of the finished form

IV. Making the Thermal Master

A. Lift polyester film and place original copy on carrier flush against the perforation

B. Lower the carbon sheet

C. Remove tissue interleave sheet

D. Turn machine on

E. Set the control dial

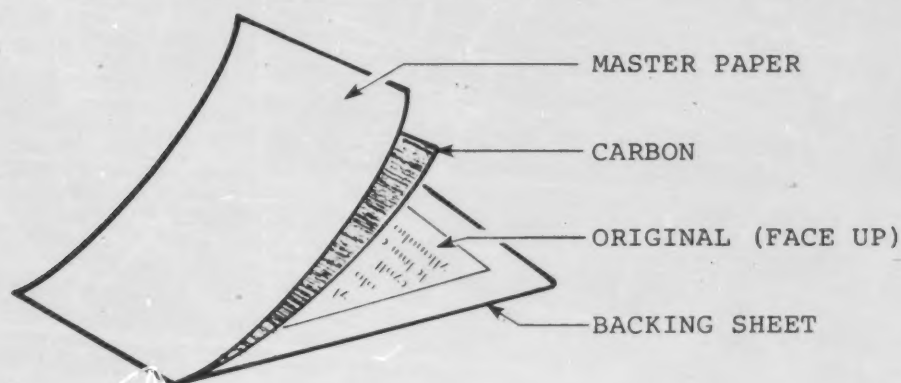
F. Insert the master into the thermal machine stub first

G. After the unit has gone through the machine, peel the carbon sheet from the master sheet

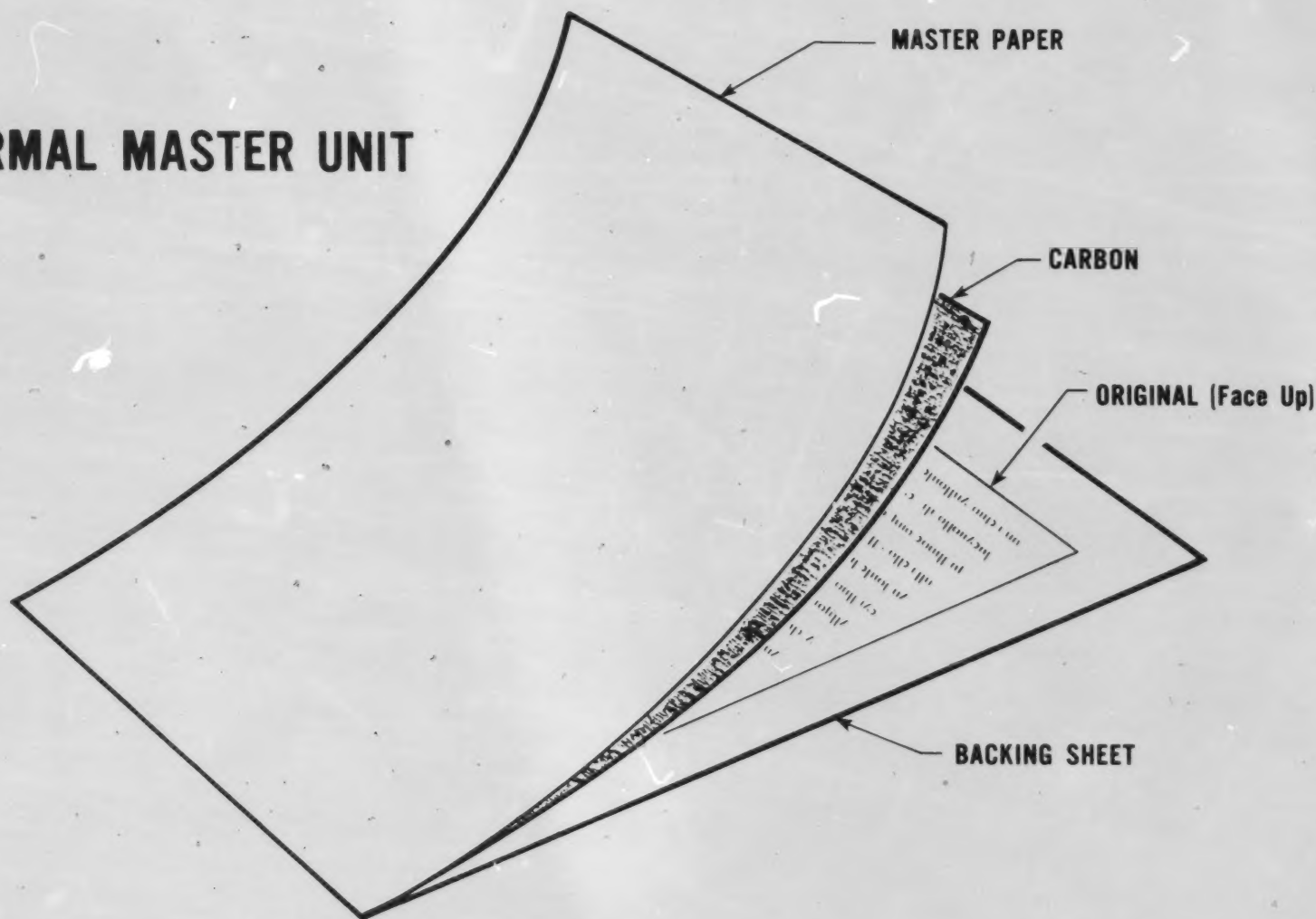
H. If master is not to be used immediately, replace the tissue sheet to protect the master

I. If the master is to be used immediately, hold master unit at the stub and tear the master from the unit

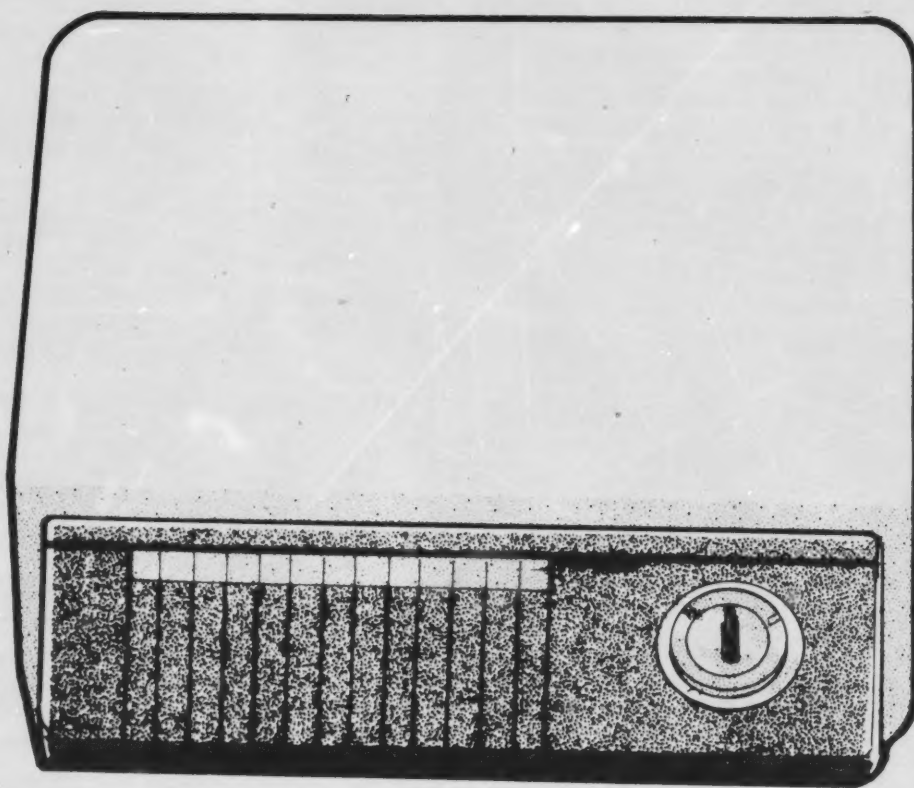
- J. Now the master can be duplicated
- V. Preparing the Original for an Overhead Transparency
 - A. Pressure-sensitive lettering can be used
 - B. If typed, a dark cloth or carbon ribbon gives the best results
 - C. An electrostatic copy is sometimes used to produce a better copy or a clearer transparency
- VI. Making the Overhead Transparency
 - A. Lay the transparency on top of the original
 - B. If the transparency has a cut corner, align with the top right-hand edge of the original
 - C. Turn machine on
 - D. Set control dial at a slower setting than that used for a thermal reactor
 - E. Place the transparency and original into the thermal machine, placing the end with the cut corner first
- VII. Thermal Process Safety Rules
 - A. Since the thermal process machine is electric, do not use with wet hands
 - B. Tie back long hair
 - C. Avoid wearing dangling jewelry
 - D. Do not wear ties or long scarves
- VIII. Parts of the Thermal Master Unit



THERMAL MASTER UNIT



INFRARED COPIER



442

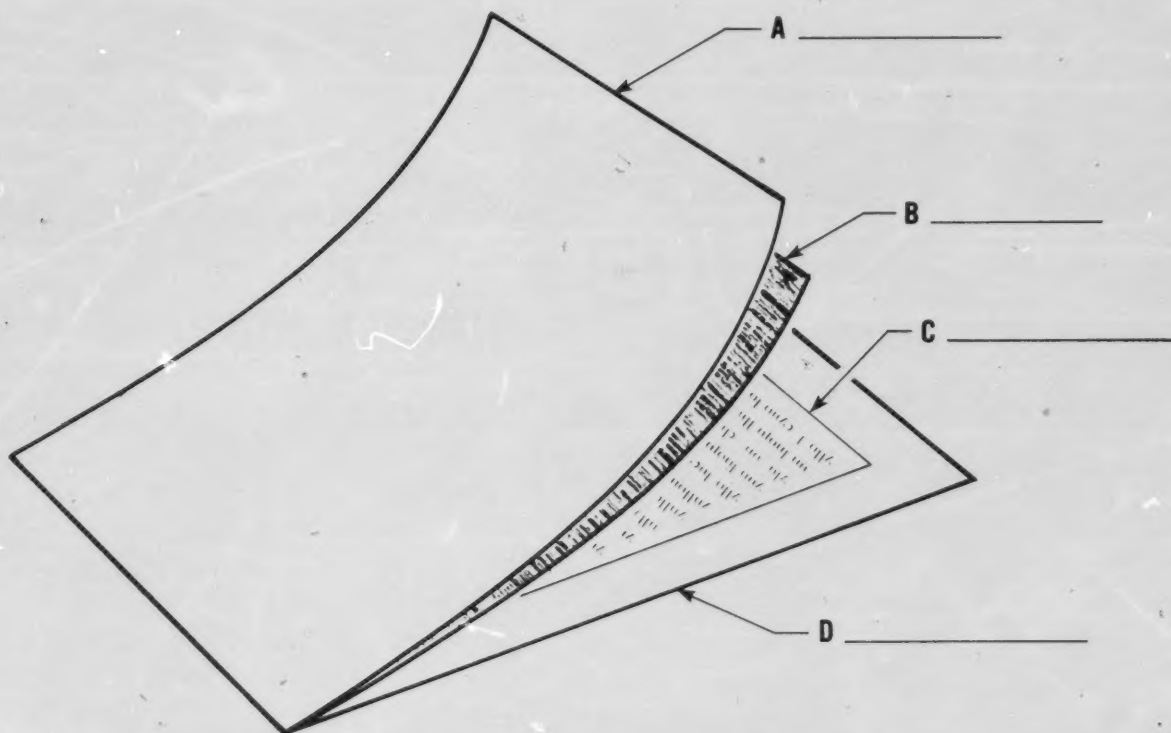
TM-2

UNIT XIII

THERMAL PROCESS

ASSIGNMENT SHEET #1--IDENTIFYING THERMAL MASTER UNIT PARTS

Directions: Identify the parts of the thermal master unit in the spaces provided below.



UNIT XIII
THERMAL PROCESS

ANSWERS TO ASSIGNMENT SHEET #1

- A. Master Paper
- B. Carbon
- C. Original (Face Up)
- D. Backing Sheet

UNIT XIII

THERMAL PROCESS

JOB SHEET #1--MAKING A THERMAL MASTER

I. Tools and equipment:

- A. Printed black and white copy
- B. Thermal master unit
- C. Thermal process machine

II. Procedure:

- A. Place the printed copy and thermal master unit on work table
- B. Lift polyester film carbon and place printed copy between film and built-in carrier
- C. Lower the carbon sheet
- D. Remove the protective tissue sheet
- E. Turn the thermal process machine ON and turn control to a fast setting
- F. Taking the assembled unit in both hands, start it through the machine, stub edge first
- G. If thermal master is not dark enough, adjust machine to the next slower speed
- H. When master has gone through machine and has acquired the desired darkness, turn the machine OFF and peel the carbon sheet from the master sheet
- I. If master is not to be used at once, replace the tissue between the carbon sheet and the snap-out master
- J. If master is to be used at once, hold unit at the stub and tear off the snap-put master sheet
- K. Duplicate in the usual manner
- L. Clean up work area of used masters and tissue sheets
- M. Replace any unused masters into storage area

UNIT XIII
THERMAL PROCESS

JOB SHEET #2--MAKING AN OVERHEAD TRANSPARENCY

I. Tools and equipment:

- A. Printed copy
- B. Overhead transparency film
- C. Thermal process machine

II. Procedure:

- A. Place the printed copy and transparency film on work table
- B. Lay the transparency on top of the original
- C. If there is a cut corner on the transparency film, align with the top right-hand edge of the paper
- D. Turn machine ON, and set to a slower setting than used to make the thermal master
- E. Holding the transparency and printed copy, start through the machine, cut corner first
- F. If transparency is not dark enough, adjust to a slower setting--if transparency is too dark, adjust to a faster speed
- G. When transparency reaches the desired darkness, turn the machine OFF
- H. Clean work area
- I. Replace unused transparencies into storage area

UNIT XIII
THERMAL PROCESS

UNIT TEST

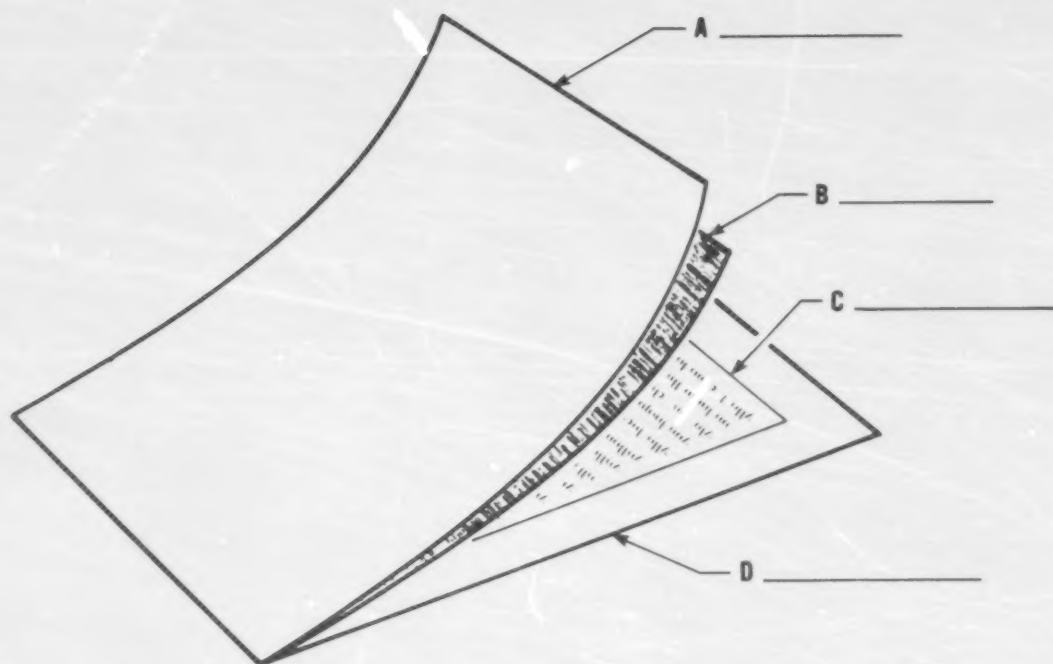
1. Match the terms on the left with the definitions on the right.

- | | |
|----------------------------------|--|
| _____ a. Thermal master | 1. The material in the thermal master unit which produces the image |
| _____ b. Polyester film carbon | |
| _____ c. Built-in carrier | 2. A system which uses an infrared light to burn an image on a specially treated master unit or transparency film |
| _____ d. Control dial | |
| _____ e. Original copy | |
| _____ f. Correcting fluid | 3. The switches on a thermal process unit which control how fast the copy goes through the machine |
| _____ g. Snap-out master | |
| _____ h. Thermal process | |
| _____ i. Overhead transparency | 4. A piece of paper in the thermal master unit on which the image is burned |
| _____ j. Tissue interleave sheet | |
| _____ k. Stub | 5. A unit which includes a polyester film carbon sheet under a paper master sheet which is used with a thermal copier |
| | 6. A liquid used to correct errors on a printed copy which does not allow light to pass through |
| | 7. A piece of paper on the bottom of the thermal master unit which helps guide the original through the thermal copier |

8. A copy from which a thermal master unit or overhead transparency is produced
 9. A thin sheet which protects a finished master unit until ready to duplicate
 10. A sheet of paper acetate which allows images to be drawn or can be copied using the thermal process
 11. The perforated top of the thermal master unit
2. State the two main uses of the thermal process machine:
- a.
 - b.
3. Identify the following statements as true or false by placing a "✓" to the left of each true statement..
- _____ a. A copy that is brightly colored works best in the thermal process machine.
 - _____ b. Correcting fluid should not be used on an original that is to be put through the thermal process.
 - _____ c. If a copy has a lot of corrections, it is best to make an electrostatic copy.
4. Place the following thermal-master-making steps in order from #1 to #10. Insert the numbers to the left of the statements in the space provided.
- _____ a. If the master is to be used immediately, hold master unit at the stub and tear the master from the unit.
 - _____ b. Lift polyester film and place original copy on carrier flush against the perforation.
 - _____ c. If master is not to be used immediately, replace the tissue sheet to protect the master.

- ☐ d. Now the master can be duplicated.
 - ☐ e. Lower the carbon sheet.
 - ☐ f. After the unit has gone through the machine, peel the carbon sheet from the master sheet.
 - ☐ g. Insert the master into the thermal machine, stub first.
 - ☐ h. Turn machine ON.
 - ☐ i. Set the control dial.
 - ☐ j. Remove tissue interleave sheet.
5. Identify the following statements as true or false by placing an "✓" to the left of each true statement.
- ☐ a. Transparency film should be run through the thermal process machine at a faster rate than a thermal master.
 - ☐ b. Pressure-sensitive letters cannot be used when preparing a copy for a transparency.
 - ☐ c. A copy that is typed on a carbon ribbon will yield excellent results.
 - ☐ d. An electrostatic copy will produce an excellent overhead transparency.
6. List the five steps in order when making an overhead transparency:
- a.
 - b.
 - c.
 - d.
 - e.
7. List the four safety rules for the thermal process machine:
- a.
 - b.
 - c.
 - d.

8. Label the parts of the thermal unit below in the spaces provided.



9. Identify thermal unit parts.
10. Demonstrate the ability to:
- Make a thermal master.
 - Make an overhead transparency.

(NOTE: If activities #9 and #10 have not been completed prior to the test, ask the instructor when they should be completed.)

UNIT XIII
THERMAL PROCESS

ANSWERS TO UNIT TEST

1. 5 a. 4 g.
 1 b. 2 h.
 7 c. 10 i.
 3 d. 9 j.
 11 e. 8 k.
 6 f.
2. a. Making thermal masters
 b. Making overhead transparencies
3. a.
 ✓ b.
 ✓ c.
4. 9 a. 7 f.
 1 b. 6 g.
 8 c. 4 h.
 10 d. 5 i.
 2 e. 3 j.
5. a. ✓ c.
 b. ✓ d.
6. a. Lay the transparency on top of the original.
 b. If the transparency has a cut corner, align with the top right-hand edge of the original.
 c. Turn machine ON.
 d. Set control dial at a slower setting than used for a thermal master.

- e. Place the transparency and original into the thermal machine, placing the end with the cut corner first.
- 7. a. Since the thermal process machine is electric, do not use with wet hands.
b. Tie back long hair.
c. Avoid wearing dangling jewelry.
d. Do not wear ties or long scarves.
- 8. a. master paper
b. carbon
c. original (face up)
d. backing sheet
- 9-10. Evaluated to the satisfaction of the instructor

UNIT XIV
MASTER MAKERS

UNIT OBJECTIVE

After completing this unit, the student should be able to identify terms dealing with master makers and have an understanding of the procedures involved in using a copier and plate burner. The student should also be aware of safety rules involved when using the master makers. This knowledge will be evidenced through demonstration and by successfully completing a unit test.

SPECIFIC OBJECTIVES

After completing this unit of instruction, the student should be able to:

1. Match terms relating to the master makers with their correct definitions
2. State safety rules for the copier and the plate burner
3. Identify true statements concerning storing plates before exposure
4. List procedures for using the plate burner
5. State the methods of storing exposed plates
6. Identify procedures for making a copy or master
7. Explain the process that will happen if the master is not run through the converter before being inked
8. Demonstrate the ability to:
 - a. Produce an offset plate to be used immediately
 - b. Apply gumming to a developed plate that is to be used later
 - c. Make a copy
 - d. Make and convert an electrostatic master

UNIT XIV
MASTER MAKERS

SUGGESTED ACTIVITIES

I. Instructor :

- A. Provide objective sheet
- B. Discuss objective sheet
- C. Pass out information sheet
- D. Discuss information sheet
- E. Make and show transparencies
- F. Distribute and discuss job sheets
- G. Demonstrate procedures outlined in job sheets
- H. Give test

II. Student :

- A. Read and discuss objective sheet
- B. Read and discuss material contained in information sheet
- C. Complete job sheets
- D. Take test

INSTRUCTIONAL MATERIALS

I. Included in this unit:

- A. Objective sheet
- B. Information sheet
- C. Transparency masters
 - 1. XIV-TM-1--Copier Controls
 - 2. XIV-TM-2--Copier Components
 - 3. XIV-TM-3--Stripping Flat

D. Job sheets

1. Job Sheet #1--Producing an Offset Plate To Be Used Immediately
2. Job Sheet #2--Gumming a Developed Plate That Is To Be Used Later
3. Job Sheet #3--Making a Copy
4. Job Sheet #4--Making and Converting an Electrostatic Master

E. Unit test

F. Answers to unit test

II. References:

- A. PlateMaker's Guide. St. Paul, Minnesota: Printing Products Division, 3M Company, 1970.
- B. Image Carrier Preparation. Graphic Communications Series, Chicago: AB Dick Company, 1970.
- C. Hawkinson, Bruce. Graphic Arts, A Curriculum Manual. Sante Fe, New Mexico: New Mexico State Department of Education, 1975.

UNIV XIV
MASTER MAKERS
INFORMATION SHEET

I. Terms and Definitions

- A. Presensitized plate--light-sensitive coated plate that permits images to be picked up by exposure to a bright light
- B. Masking sheet--a sheet on which the negative is placed which will not allow light to pass through
- C. Negative--an image taken from the original copy
- D. Flat--the negative and masking sheet that is ready for the plate burner
- E. Desensitizing--removing the light-sensitive coat that has not been exposed
- F. Lacquer--the developer that makes the exposed area visible
- G. Gumming--protection from oxidation, dirt, grease, and fingerprints for a developed plate which will be used later
- H. Oxidation--a reaction resulting from exposure to air, causing whiteness and rough surfaces on a plate
- I. Non-porous--a surface which repels water
- J. Exposure--a process of permitting light to act up-on a specially treated coating
- K. Master converter--a machine which coats the electrostatic master to prevent the margin and background areas from picking up ink
- L. Copier--a machine which takes a picture of printed materials
- M. Copyright--a legal right to control the reproduction of materials written and published
- N. Electrostatic master maker--a machine which takes a picture on master paper of materials to be reproduced

- O. Conversion solution--a liquid that is used to coat electrostatic masters before they are run on the offset.
- P. Copy paper--paper that is treated with a chemical on one side that is sensitive to light

II. Safety Rules

A. Copy Machine

- 1. Never drink or taste chemicals
- 2. Do not expose the master or copy paper to light
- 3. If the paper fails to come out of copier, turn off the power and call your instructor
- 4. When the yellow light comes on, notify your instructor

B. Plate Burner

- 1. Exposure light is very bright and could damage eyes
- 2. Plate burner is electrical; do not handle with wet hands
- 3. Chemicals to develop plates should be used in a well-ventilated area
- 4. Chemicals could cause damage to skin or eyes; use with caution

III. Storing plates before exposure

A. Store in a cool place, between 72° and 80°

- 1. Avoid radiator areas and heat vents
- 2. Avoid storing near a window

B. Store in a dry place

- 1. Avoid storing near sink counters
- 2. Avoid damp counters

C. Use oldest plates first

IV. Procedures for using the plate burner

- A. Make sure plate burner has warmed-up for at least 20 minutes
- B. Presensitized Plates
 - 1. May be damaged by moisture and fingerprints
 - 2. Can be scratched very easily
 - 3. Must be handled under subdued lighting
- C. Positioning plate and flat
 - 1. Place plate with sensitive side up
 - 2. Align flat with edge of plate
 - 3. Turn ON the vacuum
 - 4. Close burner unit
- D. Expose plate about four minutes

V. Three methods of storing exposed plates

- A. Gumming (If the plate is to be used later)
- B. Hanging storage
 - 1. Clip the plate on a line separately or place in an envelope
 - 2. There should be special cabinets for hanging
- C. Stacked
 - 1. Place protective paper between each plate
 - 2. Place plates face to face or in envelopes when placed in shallow drawers

VI. Procedures for making a copy or a master

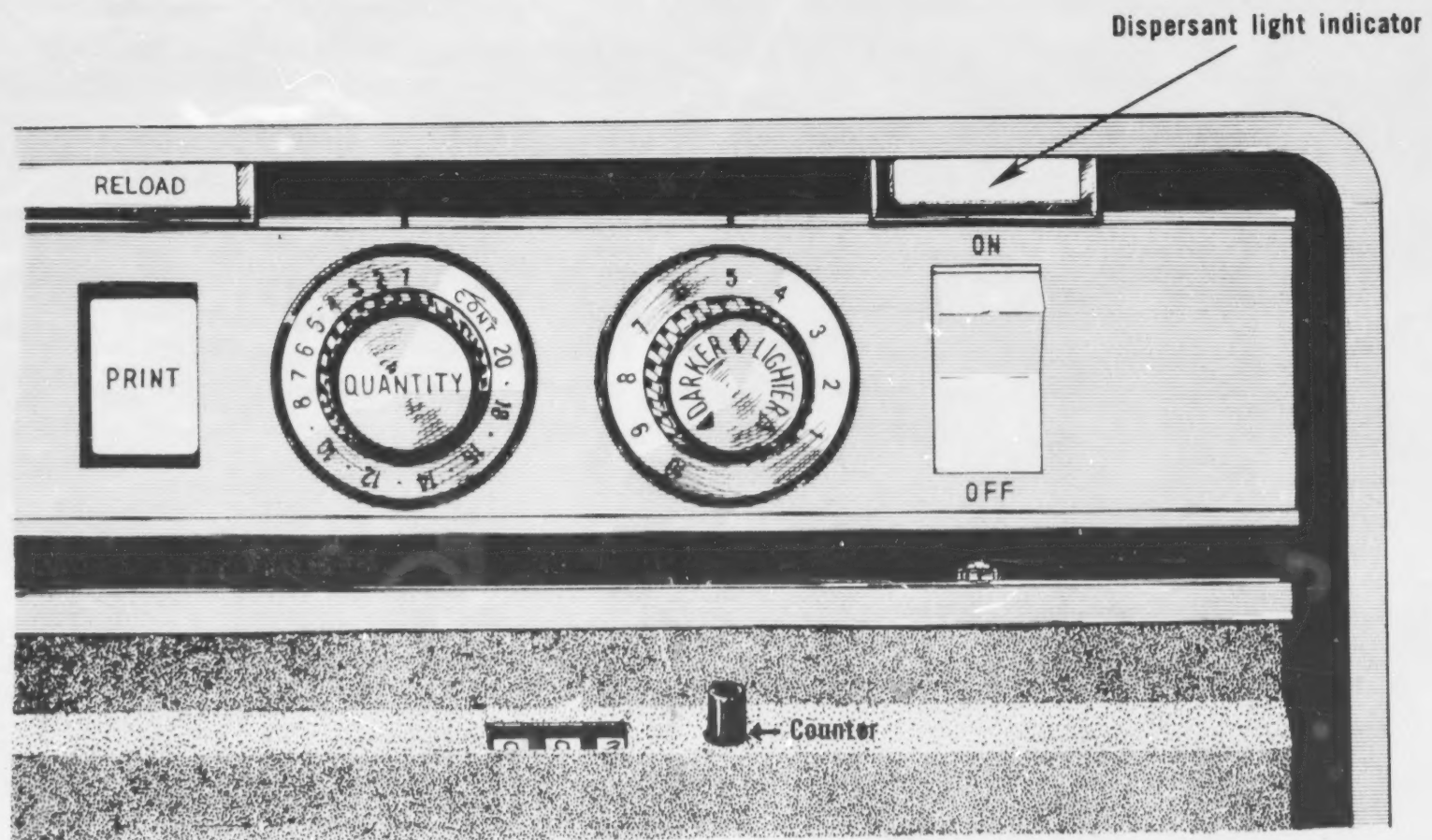
- A. Press the print button only once
- B. If the copy does not come out in the receiving tray, DO NOT press the print button again
- C. Check for paper jams inside the machine

- D. If there is a paper jam, notify your instructor at once

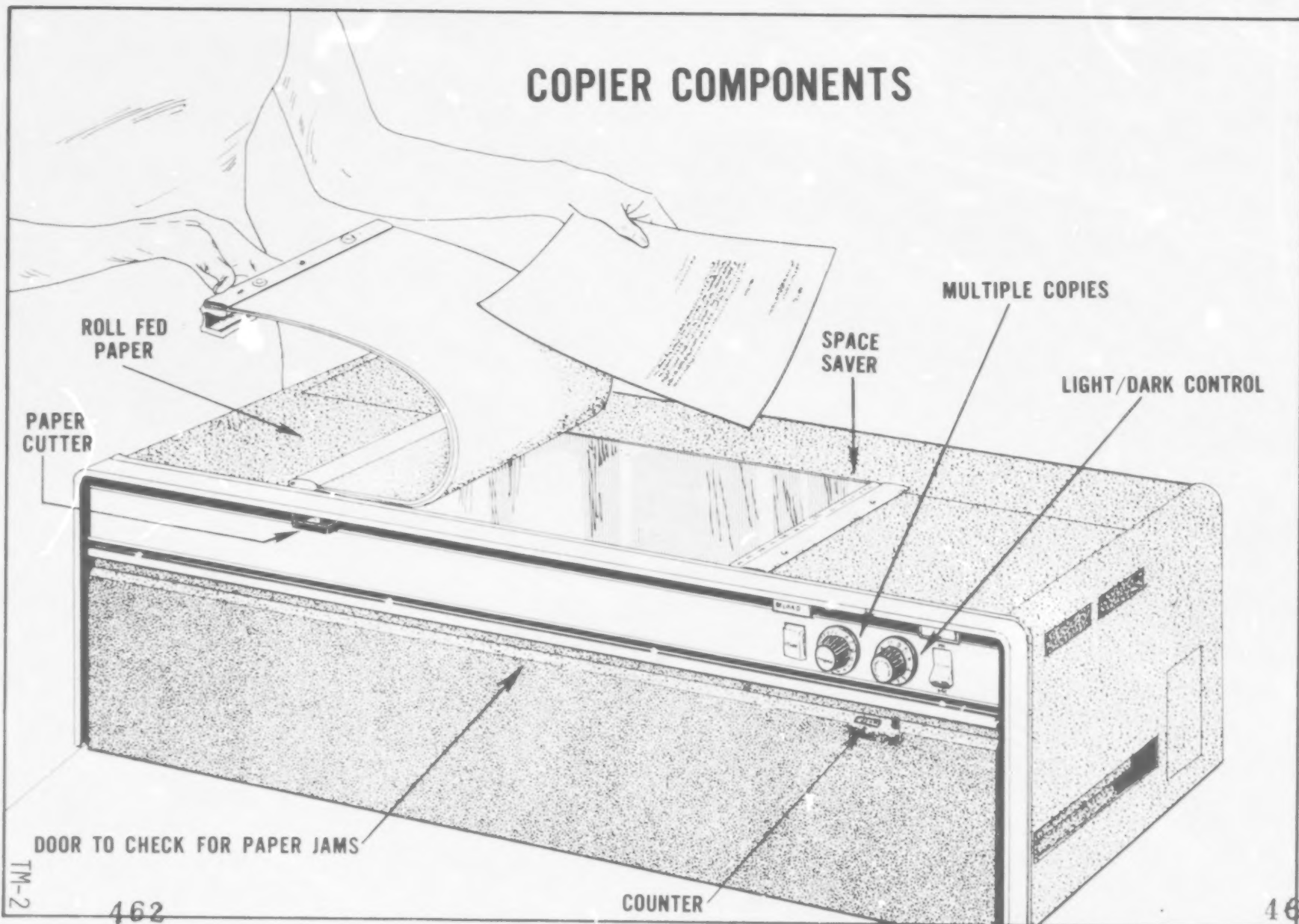
VII. Conversion of the master

- A. After the master has been made, it is ready to go through the conversion unit
- B. This process is necessary to run the master on the offset
- C. If the converter is not used, the master will turn black as soon as it is inked

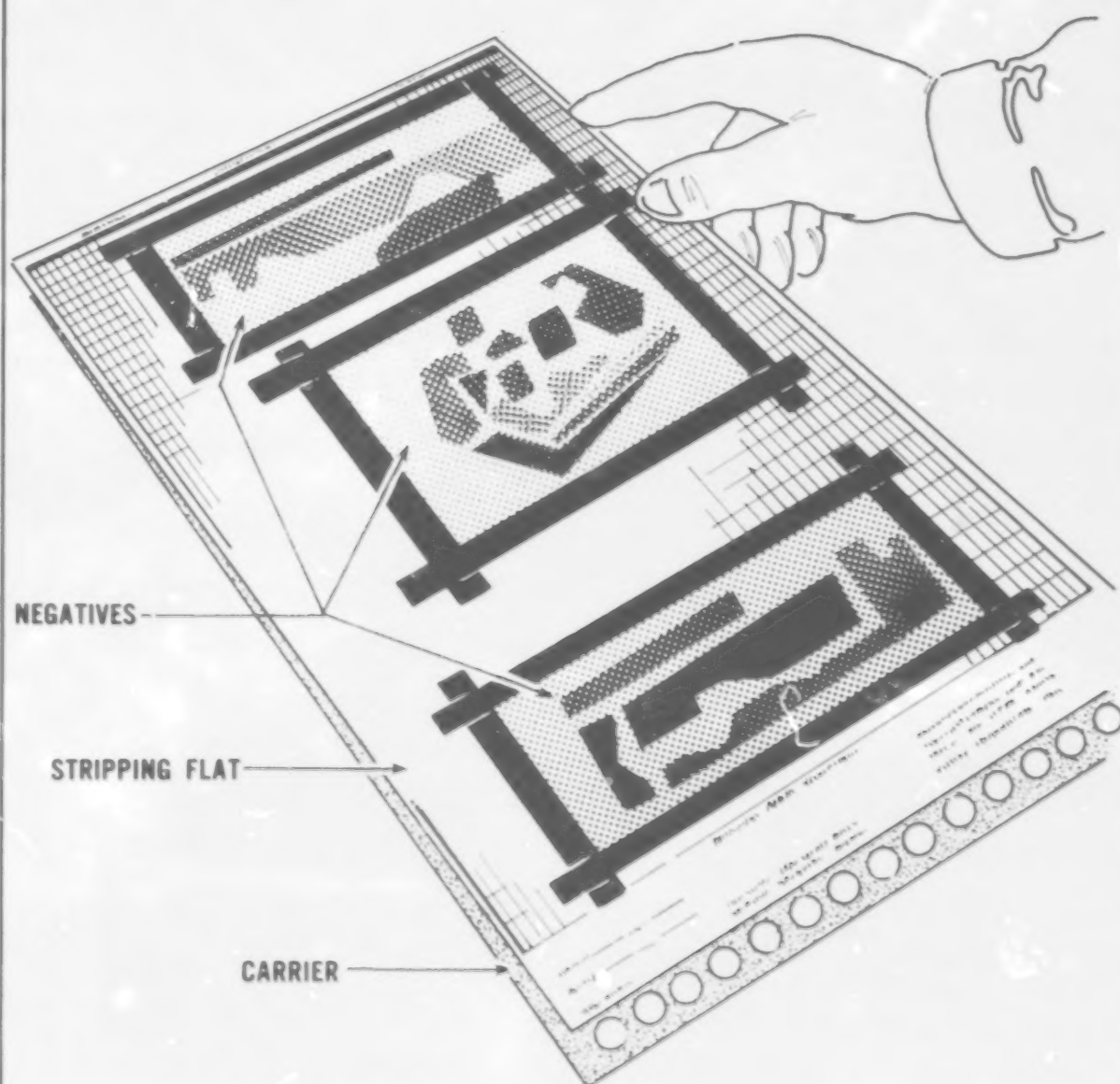
COPIER CONTROLS



COPIER COMPONENTS



STRIPPING FLAT



UNIT XIV
MASTER MAKERS

JOB SHEET #1--PRODUCING AN OFFSET PLATE
TO BE USED IMMEDIATELY

- I. Tools and equipment required:
 - A. Prepared flat
 - B. Plate burner
 - C. Presensitized plate
 - D. Sink and water
 - E. Cotton pads or sponges
 - F. Desensitizer
 - G. Lacquer
- II. Procedures: (NOTE: These procedures are general. Carefully follow directions for your machine, using the operator's manual.)
 - A. Turn plate burner on for warm-up
 - B. Assemble flat and plate on a work area
 - C. Assemble developing supplies on a non-porous surface by a sink
 - D. Open plate burner unit
 - E. Lay plate on lid of burner unit, sensitive side up
 - F. Carefully align the flat onto the plate
 - G. Turn on vacuum system, secure plastic sheet, close cover
 - H. Set timer for desired time
 - I. While plate is being exposed, shake lacquer and desensitizer
 - J. Dampen the cotton pads or sponge to be used in the developing process
 - K. When timing has finished, lift cover

- L. Turn off vacuum system only after lifting cover
(NOTE: Do not turn off plate burner unit until all plates have been made.)
- M. Lift plastic sheet and remove the plate
- N. Immediately carry plate to the sink for developing
- O. For better handling of the plate, wet an area on the developing surface to make the plate more stable
- P. Bend up one corner of the plate to make it easier to pick up
- Q. Pour enough desensitizer onto the plate to thoroughly wet it
- R. Rub the desensitizer thoroughly over the plate with a wet cotton pad or sponge
- S. While the plate is still wet with desensitizer, pour enough lacquer onto the plate to make it all the same color
- T. Rub the lacquer with a wet cotton pad or sponge, using quick strokes
- U. Rub until the image has the same darkness all over
- V. Wash excess lacquer from plate with water
- W. Dry both sides of the plate thoroughly with a clean cotton pad
- X. Plate is now ready for offset duplication
- Y. Clean up work area
- Z. Turn OFF plate burner
- Aa. Clean up work area of any spilled chemicals and other used supplies
- Bb. Store unused plates in a cool dark area

UNIT XIV
MASTER MAKERS

JOB SHEET #2--GUMMING A DEVELOPED PLATE THAT IS TO
BE USED LATER

I. Tools and equipment required:

- A. Developed plate
- B. Gum arabic
- C. Cotton pads

II. Procedures:

- A. Assemble supplies on work area
- B. Lay developed plate onto non-porous surface
- C. Pour out enough gum to completely cover plate
- D. Rub with cotton pad with long thorough strokes until entire plate area has been gummed
- E. Polish the surface until dry, using a clean cotton pad
- F. Store plate in the correct manner
(NOTE: See Section VI, Information Sheet)

UNIT XIV
MASTER MAKERS

JOB SHEET #3--MAKING A COPY

I. Tools and Equipment required:

Master copy to be copied

II. Procedures:

(NOTE: These procedures are general. Follow specific instructions contained in operator's manual for your particular model.)

- A. Go to the machine; lift the door which hides the paper
- B. Check to see if the machine has copy paper--this is lightweight paper. If not, call your instructor
- C. If the machine is ready, raise the lid on top of the machine
- D. Place your master copy with printed side next to glass, aligning next to guides as indicated on the machine
- E. Set the paper cutter indicator even with the edge of your master copy
- F. Close the lid; turn machine ON.
- G. Press the print button
- H. Your copy should come out in the receiving tray
- I. Turn OFF machine
- J. Remove master copy from machine
- K. Throw away any waste paper left lying around
- L. Clean up work area

UNIT XIV

MASTER MAKERS

JOB SHEET #4--MAKING AN ELECTROSTATIC MASTER
AND CONVERTING IT

I. Tools and equipment required:

- A. Master copy
- B. Conversion solution

II. Procedures:

(NOTE: These procedures are general. Follow specific instructions contained in operator's manual for your particular model.)

- A. Go to the electrostatic master maker
- B. Lift the door which conceals the paper
- C. Check to see if the machine is loaded with master paper (a thick heavy paper). If not, call your instructor
- D. Raise the lid on top of the machine
- E. Place the master copy, printed side next to glass, aligning with guides as indicated on the machine
- F. Set the paper cutter indicator two inches longer than the master copy
- G. Close the lid; turn ON the on/off switch
- H. Press the print button--your copy should come out in the receiving tray
- I. Leave master in tray
- J. Check the tray of the conversion unit for clean solution
- K. Check the rollers of the conversion unit to see if they are free of all dry-crust build up
- L. If the conversion unit is clean, pick up the master from the receiving tray

- M. Turn on the conversion unit
- N. Place bottom end of master in feeder opening of the conversion unit
- O. Push master through solution until the rollers catch the bottom edge of the master
- P. As the master comes out of the rollers, curl the bottom edge in your hand--give a gentle pull as it comes out of the rollers
- Q. After taking the master out of the converter, hand it to the offset duplicator operator
- R. Turn off converter
- S. Clean up area around master maker and conversion unit

UNIT XIV

MASTER MAKERS

UNIT TEST

1. Match the terms on the left with their correct definitions on the right.

- | | |
|-------------------------------------|---|
| _____ a. gumming | 1. a reaction caused by exposure to air causing whiteness and rough surfaces on a plate |
| _____ b. desensitizing | 2. the developer that makes the exposed area visible |
| _____ c. masking sheet | 3. an image taken from the original copy |
| _____ d. non-porous | 4. light-sensitive control plate that permits the pick up of images by exposure to a bright light |
| _____ e. exposure | 5. the ability to repel water |
| _____ f. flat | 6. the negative and masking sheet that is ready for the plate burner |
| _____ g. negative | 7. a sheet of paper which light cannot pass through that is used to place a negative on |
| _____ h. oxidation | 8. removing of the light-sensitive coat that has not been exposed |
| _____ i. presensitized plate | 9. a process of permitting light to act upon a specially treated coating |
| _____ j. lacquer | |
| _____ k. master converter | |
| _____ l. copier | |
| _____ m. copyright | |
| _____ n. electrostatic master maker | |
| _____ o. conversion solution | |
| _____ p. copy paper | |

10. protects from oxidation, dirt, grease, and fingerprints for a developed plate that is to be used later
 11. paper that is treated with a chemical on one side that is sensitive to light
 12. a machine which takes a picture of printed materials
 13. a liquid that is used to coat electrostatic masters before they are run on the offset
 14. a machine which coats the electrostatic master to prevent the margin and background areas from picking up ink
 15. a machine which takes a picture on master paper of materials to be reproduced
 16. a legal right to control the reproduction of written and published materials
2. a. State the safety rules for the copy machine, electrostatic master maker, and the master converter.

(1)

(2)

(3)

(4)

b. State the four safety rules for the plate burner

(1)

(2)

(3)

(4)

3. Answer the following statements by writing True or False in the spaces at the left.

_____ a. it is best to store plates between 72 and 80 degrees

_____ b. it is best to store plates in a well-heated closet

_____ c. moisture helps preserve the unexposed plate

_____ d. use the newest plates first

_____ e. if possible store near an open window

4. List the four main procedures for using the plate burner

a.

b.

c.

d.

5. State the three methods of storing exposed plates

a.

b.

c.

6. Identify the procedures for making a copy or master
 - a.
 - b.
 - c.
7. Explain what process will happen if the master is not run through the converter before being inked
8. Demonstrate the ability to:
 - a. Produce an offset plate to be used immediately
 - b. Apply gumming to a developed plate that is to be used later
 - c. Make a copy
 - d. Make and convert an electrostatic master

(NOTE: If these activities have not been accomplished prior to the test, ask the instructor when they should be completed.)

UNIT XIV
MASTER MAKERS

ANSWERS TO UNIT TEST

1. 10 a.
 8 b.
 7 c.
 5 d.
 9 e.
 6 f.
 3 g.
 1 h.
 4 i.
 2 j.
 14 k.
 12 l.
 16 m.
 15 n.
 13 o.
 11 p.
2. a. (1) Never drink or taste chemicals
 (2) Do not expose the master or copy paper to light
 (3) If the paper fails to come out of copier, turn
 the power off and call your instructor
 (4) When the yellow light comes on, notify your
 instructor

- b.
 - (1) Exposure light is very bright and could damage eyes
 - (2) Plate burner is electrical; do not handle with wet hands
 - (3) Chemicals to develop plates should be used in a well-ventilated area
 - (4) Chemicals could cause damage to skin or eyes: use with caution
3.
 - T a.
 - F b.
 - F c.
 - F d.
 - F e.
4.
 - a. Make sure plate burner has warmed up for at least 20 minutes
 - b. Presensitized plates
 - c. Positioning plate and flat
 - d. Plate should be exposed about four minutes
5.
 - a. Gumming
 - b. Hanging Storage
 - c. Stacked
6.
 - a. Press the print button only one time
 - b. If the copy does not come out in the receiving tray DO NOT press the print button again
 - c. Check for paper jams inside the machine
 - d. If there is a paper jam, notify your instructor at once
7. The master will turn black
8. Evaluated to the satisfaction of the instructor

UNIT XV

VERBAL AND NONVERBAL COMMUNICATIONS

UNIT OBJECTIVE

After completing this unit, the student should be able to understand and apply terms and techniques dealing with verbal and nonverbal communications. This knowledge will be evidenced through demonstration and by satisfactorily completing a unit test.

SPECIFIC OBJECTIVES

After completing this unit of instruction, the student should be able to:

1. Match the terms on verbal and nonverbal communication with their proper definitions
2. Complete sentences dealing with verbal and nonverbal communications
3. Describe communication aids
4. List two factors that prevent understanding communications
5. List the steps in giving directions
6. Identify the "Ten Easy Rules for Conversation"
7. Role-play situations in different areas of verbal communication
8. Practice good listening habits
9. Point out double-meaning words
10. Give directions

UNIT XV
VERBAL AND NONVERBAL COMMUNICATIONS

SUGGESTED ACTIVITIES

I. Instructor:

- A. Provide objective sheet
- B. Discuss objective sheet
- C. Pass out information sheet
- D. Discuss information sheet
- E. Make and show transparencies
- F. Distribute and discuss assignment sheets
- G. Demonstrate procedures outlined in assignment sheets
- H. Give test and evaluate results

II. Student:

- A. Read and discuss objective sheet
- B. Read and discuss material contained in information sheet
- C. Complete assignment sheets
- D. Take test
- E. Review items missed on unit test with your instructor

INSTRUCTIONAL MATERIALS

I. Included in this unit:

- A. Objectives
- B. Information sheet
- C. Transparency masters
 - 1. XV-TM-1--Pyramid Blocks of Success
 - 2. XV-TM-2--Cheerful Voices

3. XV-TM-3--Oral Communication
4. XV-TM-4--Nonverbal Communication

D. Assignment sheets

1. Assignment Sheet #1--Role-playing Different Areas of Verbal Communication
2. Assignment Sheet #2--Practicing Good Listening Habits
3. Assignment Sheet #3--Identifying Double-meaning Words
4. Assignment Sheet #4--Giving Directions

E. Answers to assignment sheets

F. Test

G. Answers to test

II. References

- A. Laird, Donald A., Eleanor C. Laird, Rosemary T. Fruekling and W. Porter Swift. Psychology, Human Relations and Motivation. 5th ed. New York: Gregg and Community College Division, McGraw-Hill Book Company, 1975.
- B. Russon, Allien R. Personality Development for Business. 4th ed. Cincinnati: Southwestern Publishing Company, 1973.
- C. Poe, Roy W. and Rosemary T. Fruekling. Business Communication. New York: Gregg Division, McGraw-Hill Book Company, 1973.

UNIT XV

VERBAL AND NONVERBAL COMMUNICATION

INFORMATION SHEET

I. Terms and definitions

- A. Communication--exchanging ideas, opinions, or information by speech or signs
- B. Verbal--communications using words
- C. Nonverbal--communications other than verbal
- D. Volume--loudness of the voice
- E. Pitch--highness or lowness of the voice
- F. Tone--quality of the voice
- G. Tempo--rate or speed of talking
- H. Pronunciation--speaking correctly
- I. Enunciation--saying words distinctly and clearly
- J. Positive communications--those indicating approval
- K. Negative communications--those indicating rejection or disagreement
- L. Brevity--using a few words to give one's message
- M. Variety--not saying the things the same way, such as beginning every sentence in the same way
- N. Itemization--improving clearness by listing in detail what one wishes to communicate
- O. Empathy--understanding and appreciating another person's feelings or ideas
- P. Tact--having the ability to do or say the right thing at the right time
- Q. Monotone--speaking in a voice in which the key and pitch is never varied

II. Verbal and Nonverbal Communication

- A. Verbal and nonverbal positive communication aids listening and speaking
- B. Verbal and nonverbal negative communication blocks listening and speaking
- C. Verbal and nonverbal communication consists of receivers who are listeners and senders who are the speakers

III. Communication Aids

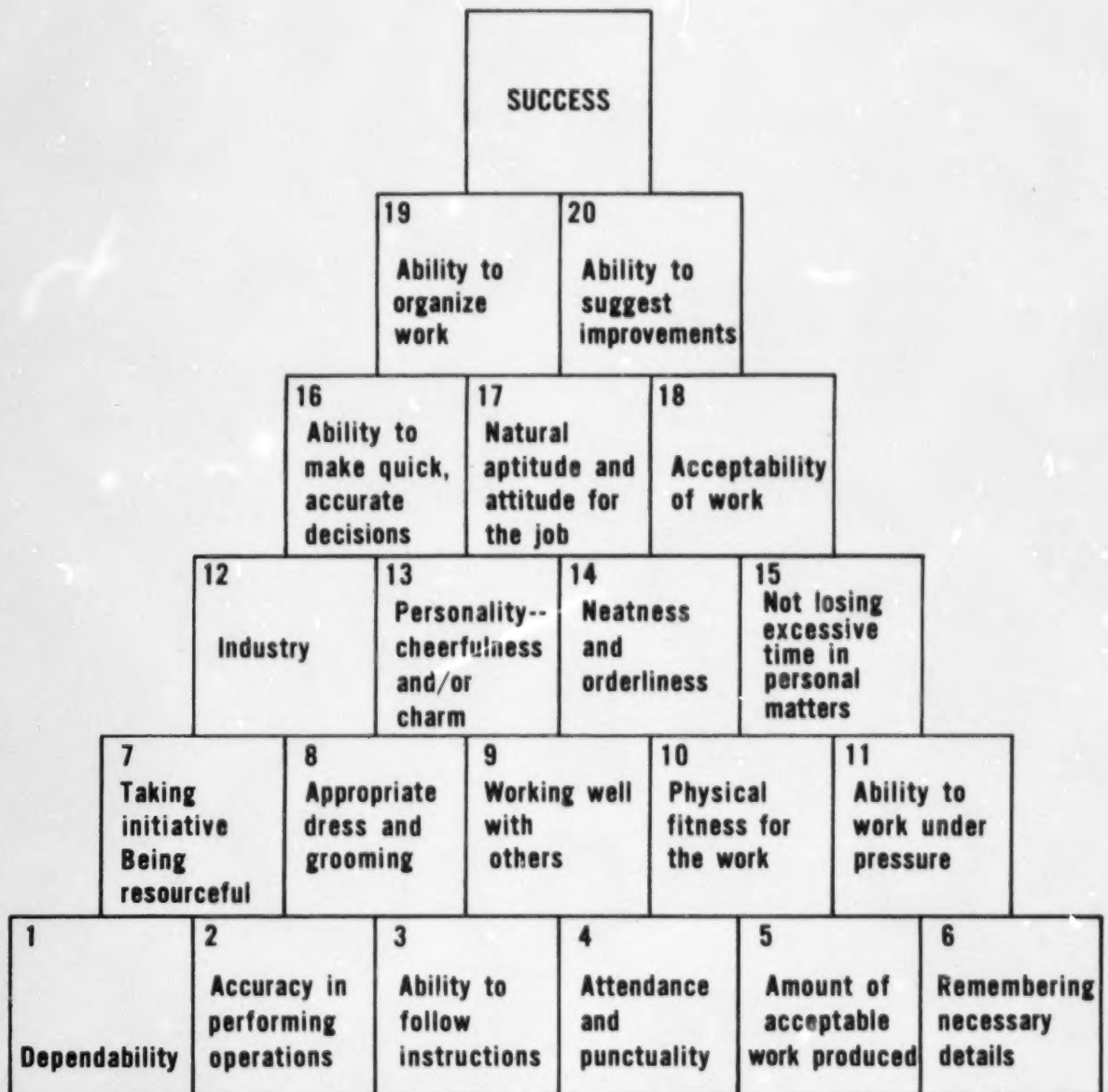
- A. Rules for the sender
 - 1. Be specific
 - 2. Be clear, using:
 - a. Brevity
 - b. Variety
 - c. Itemization
 - 3. Be positive
- B. Characteristics of a good sender
 - 1. Talks carefully and clearly and is pleasant to see and hear
 - 2. Leaves listeners with a feeling of having learned something
 - 3. Leaves listeners wanting to hear speaker again
 - 4. Is well-groomed
 - 5. Uses good posture, avoids distracting mannerisms, considers audience, and chooses words carefully
 - 6. Speaks on interesting topics
 - 7. Accents speech to make conversation more interesting
- C. Characteristics of a good receiver

1. Pays attention and looks at the speaker
 2. Interrupts only if invited
 3. Takes well-organized notes
 4. Avoids the stumbling blocks of good listening
 - a. Daydreaming
 - b. Avoiding distractions
- D. Tips for improving one's speaking
1. Relaxation--Yawning is an excellent way of relaxing the throat
 2. Practice--Take every opportunity one has to talk with others
- E. Ways to improve one's feeling tone
1. Empathy
 2. Tact
- IV. Understanding (relating) communication
- A. Words with double meanings
1. Make meaning clear
 2. Adjust words to audience
- B. Unclear statements
1. Make statements clear
 2. Repeat the statements as questions
- V. Giving directions
- A. Use clear speech
- B. Be "to the point"
- C. Give step-by-step instructions
- D. Give steps in order

VI. "Ten Easy Rules" for Conversation

- A. Show concern in conversation
- B. Speak slowly and clearly
- C. Listen
- D. Avoid using flat negatives
- E. Speak only if you know the subject
- F. Keep conversations brief and give the other person a chance to speak
- G. Use eye contact
- H. Make statements positive
- I. Force oneself to talk, even if it is difficult to get started
- J. Keep a tolerant attitude and avoid preaching to the other person

PYRAMID BLOCKS OF SUCCESS



* Taken from: Personality Development for Business 4th ed.
Cincinnati: South-Western Publishing Co., 1973.

TM-1

CHEERFUL VOICES



ORAL COMMUNICATIONS



NONVERBAL COMMUNICATION



UNIT XV

VERBAL AND NONVERBAL COMMUNICATION

ASSIGNMENT SHEET #1--ROLE-PLAYING DIFFERENT AREAS
OF VERBAL COMMUNICATIONS

Directions: Students will read, discuss, and role-play the following areas of verbal communication:

1. Speaking too loud

Information: Volume of the voice is important; a voice too loud is distracting and annoying.

Activity: Read the following words, speaking too loud: "The name of this class is ODP--Office Duplication Practices. In this course you will learn to operate the spirit duplicator, typewriter, folder, collator, paper drill, and paper cutter."

2. Speaking too soft

Information: If the voice is too soft, the speaker cannot be heard.

Activity: Read the following words softly: The student will learn to operate the mastermaker, converter, and offset duplicator. The jogger, headline machine, stencil duplicator, and binder are also included in this class."

3. Speaking with a high-pitched voice

Information: A voice that is unpleasantly high in pitch can be lowered over a period of time by applying a little effort.

Activity: Using a high-pitched voice, read the following sentence: "You will be taught to file, read want ads, use the telephone directory, learn how to get a job and keep it, and apply consumer math."

4. Good, moderately low voice

Information: A moderately low voice is usually the most pleasing

Activity: Using a moderately low voice, read the following sentence: "Personal improvement is practiced in ODP, and learning good grooming, good manners, and cleanliness are important parts of this improvement."

5. Depressing, sad voice

Information: Your tone of voice reveals your attitudes and feelings. A pleasant, cheerful tone using variations (as opposed to monotones) will add interest to your speaking.

a. Activities: Recite the following sentences using the tone of voice indicated for each:

- (1) Depressing, sad voice: "Office Duplication Practices can be a lot of fun. Note pads, stationery, and invitations can be made for our parties."
- (2) Cheerful voice: "Sometimes we have free time and can make personal items such as Easter cards, Christmas cards, and gifts for friends."
- (3) Monotone voice: "An important element of ODP is safety. General safety rules are observed for the entire class. Specific safety rules are observed with each machine."

6. Too fast

Information: The tempo of speaking can detract from or enliven one's speaking. If one talks too fast to be understood, slow down. Speech patterns that are too slow are boring.

a. Activities: Read the following sentences using the tempo of speech indicated:

- (1) Too fast: "Other units to be learned are inventory, filing, layout, paper, and calculator. You will use the thermal machine and learn routine office procedures."
- (2) Too slow: "We are now working on the unit of communications. In this part of the unit we are learning that one should not talk too slowly."

7. Mispronouncing words

Information: Pronouncing words incorrectly can detract from your meaning.

Activity: Read the following paragraph pronouncing the incorrect words underlined: "If you are a noo (new) stoodent (student) to this class, you will learn there

are a lot of jobs that cause prespiration (perspiration) and the wearing of an aparn (apron), you will be expected to perform your dooty (duty) to the best of your ability."

8. Unclear enunciation

Information: Saying words distinctly and clearly is an asset to good communication. Practice proper enunciation.

Activity: Read the following paragraph as it is:
"I'm gawna tell ya bout the mastermaker. Ya use a metal plate with a light-sensitive paper and develop it sorta like filum. If you watcha door you end up wit an image on the metal plate."

9. Verbal positive listening

Information: Verbal positive listening is accomplished by statements such as "that is good," "I agree," "You have good ideas."

Activity: Select one speaker and one listener. Have them sit or stand facing each other. The speaker will speak for one minute on a subject that has been selected previously. As the speaker speaks, the listener will use the following statements (and similar statements): "Tell me more," "That's right," "I agree," "You have good ideas," and "That's a great suggestion."

10. Verbal negative listening

Information: Verbal negative listening is demonstrated by statements such as "That's dumb!", "What a stupid thing to say!"

Activity: Select one speaker and one listener. Have them sit or stand facing each other. The speaker will speak for one minute on a subject that has been selected previously. As the speaker speaks, the listener will use the following statements (and similar statements): "That's dumb!", and "What a stupid thing to say!"

UNIT XV

VERBAL AND NONVERBAL COMMUNICATIONS

ASSIGNMENT SHEET #2--PRACTICING GOOD LISTENING HABITS

Directions: After listening to the instructor, read the complete paragraph and fill in the blanks with the correct words.

One of the most important (1) _____ contributing to one's (2) _____ in all aspects of (3) _____ is the habit of (4) _____ (5) _____. This habit is so important that a number of large (6) _____ provide (7) _____ (8) _____ (9) _____ for their (10) _____. To be successful in (11) _____ one attempts good (12) _____ habits should be established. A (13) _____ must listen, a (14) _____ must listen, a (15) _____ must listen and a (16) _____ must listen. An important pattern to establish is:

"You (17) _____ now and I will (18) _____. Then I will (19) _____ and you will (20) _____. No (21) _____, (22) _____ or (23) _____ can run smoothly if good listening habits are not observed.

UNIT XV

VERBAL AND NONVERBAL COMMUNICATION

INSTRUCTOR S SHEET FOR ASSIGNMENT SHEET #2

Directions: The instructor will read the following paragraph aloud to the class members before having them complete Assignment Sheet #2.

One of the most important factors contributing to one's success in all aspects of life is the habit of good listening. This habit is so important that a number of large corporations provide training in listening for their executives. To be successful in anything one attempts, good listening habits should be established. A supervisor must listen, a worker must listen, a teacher must listen, and a student must listen. An important pattern to establish is:

"You talk now and I will listen. Then I will talk and you will listen." No business, industry or classroom can run smoothly if good listening habits are not observed.

UNIT XV

VERBAL AND NONVERBAL COMMUNICATION

ASSIGNMENT SHEET #3--IDENTIFYING DOUBLE-MEANING WORDS

Directions: Each student will list five words having double meanings and be prepared to discuss the words and their meanings.

Examples:

1. cell, sell
2. sail, sale
3. pale, pail
4. knight, night
5. meet, meat

UNIT XV

VERBAL AND NONVERBAL COMMUNICATION

ASSIGNMENT SHEET #4--GIVING DIRECTIONS

Directions: Three volunteer students will leave the classroom and will reenter one at a time when called. A jacket will be placed across a chair. The first volunteer will reenter the room and, while facing away from a student standing by the jacket, will proceed to give directions on how to put on the jacket. When finished with the first student, repeat the same procedure with the remaining two students.

UNIT XV

VERBAL AND NONVERBAL COMMUNICATION

INSTRUCTOR'S SHEET FOR ASSIGNMENT SHEET #4

1. Send three volunteers out of the classroom. Drape a jacket across the back of a chair. Explain to the remainder of students that one student coming back will direct another student in the room how to put on the jacket, using explicit directions. Do only steps you are told to do and do them exactly as stated. If the director neglects to say, "Pick the coat up," then the coat will still be on the chair when the director is finished with all of the instructions.
2. Call one student to come inside the classroom. Ask that student to select someone inside the room and give that student instructions on how to put on the jacket. The director will face away from the one receiving instructions.
3. When that pair of students is finished, continue with the remaining two pairs of students.
4. Invite any student who wishes to attempt to give proper instructions to come forward, choose a partner, and begin.
5. Discuss proper method of giving instructions.

UNIT XV

VERBAL AND NONVERBAL COMMUNICATION

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #2

1. assets
2. success
3. life
4. good
5. listening
6. corporations
7. training
8. in
9. listening
10. executives
11. anything
12. listening
13. supervisor
14. worker
15. teacher
16. student
17. talk
18. listen
19. talk
20. listen
21. business
22. industry
23. classroom

UNIT XV

VERBAL AND NONVERBAL COMMUNICATIONS

UNIT TEST

1. Terms and Definitions

Match the terms on the left with the best definitions on the right.

- | | |
|----------------------------------|---|
| _____ a. Oral | 1. Quality of voice |
| _____ b. Verbal | 2. Unspoken communications |
| _____ c. Nonverbal | 3. Those indicating approval |
| _____ d. Volume | 4. Rate or speed of talking |
| _____ e. Pitch | 5. Spoken communications |
| _____ f. Tone | 6. Highness or lowness of voice |
| _____ g. Tempo | 7. Those indicating rejection or disagreement |
| _____ h. Pronunciation | 8. Communications consisting of or using words |
| _____ i. Enunciation | 9. Saying words distinctly, clearly |
| _____ j. Positive communications | 10. Loudness of the voice |
| _____ k. Negative communications | 11. Speaking correctly |
| _____ l. Brevity | 12. Avoiding sameness in communications |
| _____ m. Empathy | 13. Using a few words to express one's message |
| _____ n. Variety | 14. Understanding and appreciating another person's feelings or ideas |
| _____ o. Communications | 15. Exchanging ideas, opinions or information by speech or signs |

2. Fill in the blanks with the correct terms to complete the following sentences.
 - a. Verbal and nonverbal _____ communications aid good listening and speaking
 - b. Verbal and nonverbal _____ communications block good listening and speaking.
 - c. Verbal and nonverbal communications consist of
 - (1) _____ which are listeners and
 - (2) _____ which are the individuals talking.
3. Describe communication aids by
 - a. Listing three rules for the sender.
 - 1.
 - 2.
 - 3.
 - b. Listing two tips to improve speaking and describe each.
 - a.
 - b.
 - c. Listing two ways to improve the feeling tone of a voice.
 - a.
 - b.
4. List two factors that prevent understanding communications.
 - a.
 - b.

5. List the four steps in giving directions.
 - a.
 - b.
 - c.
 - d.
6. Identify the "Ten Easy Rules for Conversation," by placing a (✓) beside each correct rule.
 - _____ a. Shows concern in conversation
 - _____ b. Speaks fast
 - _____ c. Listens
 - _____ d. Uses flat negatives
 - _____ e. Speaks only if informed on a subject
 - _____ f. Uses eye contact
 - _____ g. Make statements positive
 - _____ h. Forces oneself to talk
 - _____ i. A little preaching won't hurt the listener
 - _____ j. Keep conversations brief
7. Role-play in different areas of verbal communications.
8. Practice good listening habits.
9. Identify double-meaning words.
10. Give directions.

(NOTE: If activities #8-#11 have not been completed prior to the test, ask the instructor when they should be completed.)

UNIT XV
VERBAL AND NONVERBAL COMMUNICATIONS

ANSWERS TO UNIT TEST

1. 5 a.
 8 b.
 2 c.
 10 d.
 6 e.
 1 f.
 4 g.
 11 h.
 9 i.
 3 j.
 7 k.
 13 l.
 14 m.
 12 n.
 15 o.
2. a. positive
 b. negative
 c. (1) receivers (2) senders
3. a.
 (1) be specific
 (2) be clear
 (3) be positive
 b. (1) Relaxation--Yawning is an excellent way of
 relaxing the throat

- (2) Practice--Take every opportunity you have to talk with others
- c. (1) Empathy
- (2) Tact
- 4. a. Words with double meanings
- b. Unclear statements
- 5. a. Clarity of speech
- b. Explicit, clear directions
- c. Step-by-step directions
- d. Each step in order
- 6. ☒ a.
- ☐ b.
- ☒ c.
- ☐ d.
- ☒ e.
- ☒ f.
- ☒ g.
- ☒ h.
- ☐ i.
- ☒ j.

7-10 Evaluated to the satisfaction of the instructor.